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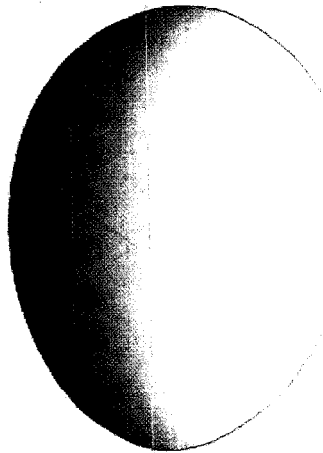
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**emborex<sup>®</sup>**

THE IN OVO COMPANY<sup>®</sup>

# Annual Report 2005



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FINANCIAL

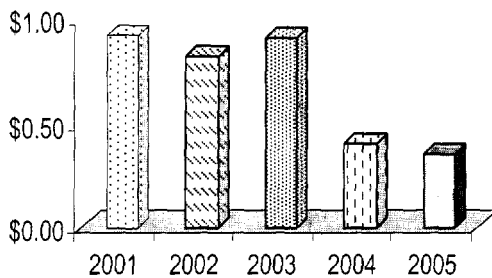
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## About Embrex®, Inc.

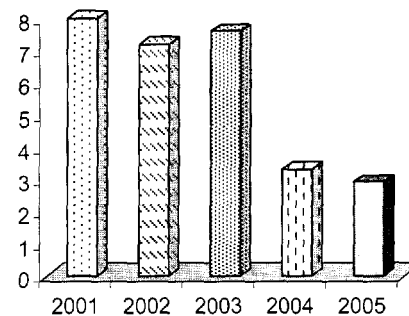
Embrex®, Inc., The In Ovo Company®, is the world leader in providing *in ovo* solutions to the global poultry industry. The Company's platform technology, the Inovoject® automated egg injection system, vaccinates chickens while still in the egg, thereby eliminating the need for vaccination against certain diseases after hatch. Embrex's Inovoject® system has been widely accepted and currently inoculates about 35 million eggs per day, or approximately one-third of the world's chickens that are grown in a vertically integrated business environment. We believe acceptance of *in ovo* technology will continue to grow, allowing us to further expand in markets worldwide. In addition, Embrex develops and markets novel poultry vaccines that can be delivered *in ovo* using the Inovoject® system.

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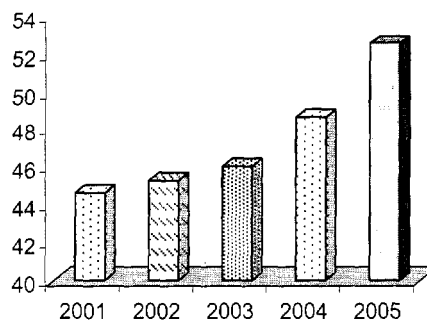
### Financial Highlights *(in millions of dollars except per share data)*



*Earnings per share*  
% change '04 to '05: (12%)



*Net Income*  
% change '04 to '05: (11%)



*Revenue*  
% change '04 to '05: 8%

## To Our Shareholders

While 2005 presented considerable challenges, Embrex employees rose to the occasion by growing our business and developing our Inovocox™ *in ovo* coccidiosis vaccine.

For the first time, we surpassed the \$50 million revenues milestone, achieving our target of \$52.5 million. On a consolidated basis, our total revenues grew by 8% year-over-year. Separately, product sales increased 55% and recurring device revenues rose 8% year-over-year. U.S. revenues were up approximately 3% year-over-year, which we believe is a remarkable accomplishment considering the United States is a mature market for Embrex.

Outside the United States, revenues rose 17%. Consequently, international operations now account for 37% of our total revenues, up from 34% last year and 32% in 2003. We believe this trend will continue. This growth has been especially strong in Latin America, led by Brazil, the world's second largest poultry producing nation behind the United States. Just as importantly, international profits on a pretax basis are up five-fold year-over-year with a significant improvement in our Latin American and Asian regions.

While Embrex's revenue growth was encouraging, we are also proud of our net income performance of \$2.9 million for 2005 compared to \$3.3 million in 2004 as we reduced operating expenses and research and development expenses, absorbed \$1.9 million in Sarbanes-Oxley compliance expenses and mandated equity expenses as well as \$0.3 million of severance costs. In addition, we were investing in the Inovocox™ effort and building our international infrastructure, particularly in Latin America.

### Vaccines

On the new product development front, our Inovocox™ *in ovo* coccidiosis vaccine met our internal milestones, culminating in submission in December of our dossier for U.S. Department of Agriculture approval. While expenses related to the pre-launch Inovocox™ activities in sales and marketing, as well as those associated with the manufacturing facility, increased year-over-year, we believe they are reflective of the opportunity that this project represents for Embrex and its shareholders.

Consistent and growing revenues for Bursaplex®, our bursal disease vaccine, contributed nicely this year. Although this was led by our Asian group, Latin America's contribution was also significant. We anticipate modest growth in product sales in 2006.

## Looking Ahead

While we believe we are well-positioned to continue to grow, especially outside the United States, avian influenza and the impact it may have on the global poultry industry is an unknown. As of this writing, no H5N1 high-pathogenic avian influenza has been discovered in North or South America, the source of 78% of our revenues in 2005. However, outbreaks of H5N1 high-pathogenic avian influenza in Europe and Asia have affected chicken meat consumption patterns, although the Asian market appears to be recovering somewhat. Similarly, we do not know if the impact on European consumption will be short- or long-lived. That said, the threat continues to make headlines worldwide and we believe some important factors to watch include egg sets, poultry prices and demand, trade restrictions, public opinion, and how well governments and industry respond to news of an outbreak. We encourage you to learn more about avian influenza by visiting web sites such as [www.who.org](http://www.who.org), [www.cdc.gov](http://www.cdc.gov), [www.usda.gov](http://www.usda.gov) or [www.nationalchickencouncil.com](http://www.nationalchickencouncil.com). We are pleased that the U.S. industry is taking the avian influenza threat very seriously by implementing testing and monitoring programs for avian influenza, enhancing biosecurity measures at their facilities, and educating the public about food safety. Embrex is committed to doing our part to maintain proper biosecurity while visiting customers' sites as well as in our own offices.

While 2005 was a challenging year, we made solid progress and are optimistic for 2006. We remain focused on our priorities – international growth and advancing our Inovocox™ *in ovo* coccidiosis vaccine.

None of this is possible without the hard work and dedication of our employees. I applaud their efforts to provide gold-standard service to our customers, to develop and commercialize innovative products, as well as enhance existing products. We also thank you, our shareholders, for your continued support. I look forward to reporting our progress to you during 2006.

Sincerely,



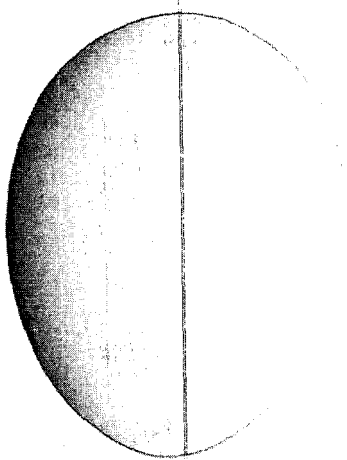
Randall L. Marcuson

President & Chief Executive Officer

March 20, 2006



## 2005 Form 10-K



The copy of the Company's Annual Report on Form 10-K for the period ended December 31, 2005 immediately following this page omits Exhibit 10.23, the Embrex, Inc. Amended and Restated Incentive Stock Option and Non-statutory Stock Option Plan, which has been filed with the Securities and Exchange Commission. One copy of Exhibit 10.23 will be furnished without fee upon written request of a security holder of Embrex, Inc. directed to the Secretary of the Company at the address on the front page of the Form 10-K.

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**  
**WASHINGTON, D.C. 20549**  
**Form 10-K**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2005  
Commission file number 000-19495

**Embrex, Inc.**

(Exact name of registrant as specified in its charter)

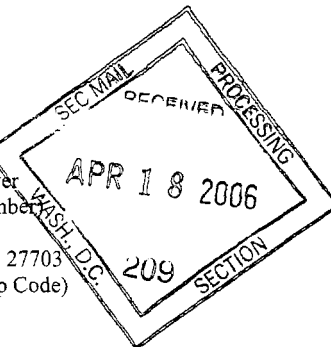
North Carolina  
(State or other jurisdiction  
of incorporation or organization)

56-1469825  
(I.R.S. Employer  
Identification Number)

1040 Swabia Court, Durham, North Carolina  
(Address of principal executive offices)

27703  
(Zip Code)

(919) 941-5185  
(Registrant's telephone number, including area code)



**SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT: NONE**

**SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT:**

Common Stock, \$.01 Par Value Per Share (and Rights Attached Thereto)  
(Title of class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes \_\_\_ No X

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes \_\_\_ No X

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes X No \_\_\_

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check One):

Large accelerated filer \_\_\_ Accelerated filer X Non-accelerated filer \_\_\_

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes \_\_\_ No X

As of June 30, 2005, the aggregate market value of the voting and non-voting common stock held by non-affiliates was \$91,877,146 million, based on 7,989,317 outstanding shares of voting and non-voting common stock held by non-affiliates and a closing price per common share of \$11.15 on that date. Affiliates held 353,115 shares as of June 30, 2005.

As of February 17, 2006 there were 8,180,047 shares of the registrant's common stock outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

**Document**

**Where Incorporated**

Portions of the Proxy Statement relating to the Annual Meeting of Shareholders to be held on May 18, 2006, to be filed with the Securities and Exchange Commission

Part III

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## PART I

Information set forth in this Annual Report on Form 10-K of Embrex, Inc. contains various “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These statements represent the Company’s judgment concerning the future and are subject to risks and uncertainties that could cause the Company’s actual operating results and financial position to differ materially. Such forward-looking statements can be identified by the use of forward-looking terminology such as “may,” “will,” “expect,” “plan,” “intend,” “target,” “anticipate,” “estimate,” “believe” or “continue,” or the negative thereof or other variations thereof or comparable terminology.

The Company cautions that any such forward-looking statements include statements with respect to future products, services, markets and financial results. These statements involve risks and uncertainties that could cause actual results to differ materially. Risks include, without limitation, the degree of growth in the U.S. and global poultry industry, competition arising within the United States and elsewhere, possible decreases in production by the Company’s customers, avian disease outbreaks in domestic and/or global markets, market acceptance and cost of expansion in new geographic markets, and the Company’s ability to penetrate new markets. Risks also include the degree of market acceptance of new products, such as Newplex™, and the ability of the Company’s contract manufacturers to support such products. Additional risks include the complete commercial development of potential future products on a cost effective basis, including Inovocox™, the availability of adequate supplies, and the ability to obtain regulatory approval of products. Such approval is dependent upon a number of factors, such as results of trials, the discretion of regulatory officials, and potential changes in regulations. Additional information on these risks and other factors that could affect the Company’s consolidated financial results are described in Item 1A, “Risk Factors,” below and in the Company’s other filings with the Securities and Exchange Commission, including the Company’s Forms 10-Q and 8-K.

### ITEM 1. BUSINESS

#### GENERAL

Embrex, Inc., the In Ovo Company® (“Embrex” or the “Company”), is an international biotechnology company engaged in the development of innovative *in ovo* (“in the egg”) solutions that meet the needs of the global poultry industry. The Company’s unique integration of several scientific and engineering disciplines enables it to be the leading provider of *in ovo*, value-added solutions with its automated injection and detection devices as well as certain select vaccines. Embrex is focused on developing patented biological and mechanical products that improve bird health, help reduce production costs and provide other economic benefits to the poultry industry. The Company was incorporated in 1985 in North Carolina and is headquartered in the Research Triangle Park, North Carolina area.

Embrex has developed and commercialized the Inovoject® system, a proprietary, automated in-the-egg injection system that can process 20,000 to 70,000 eggs per hour and eliminates the need for manual, post-hatch injection of certain vaccines. The Inovoject® system is designed to inject vaccines and other compounds into targeted compartments within the egg. Some of these *in ovo* vaccines are marketed by Embrex while others are marketed by third parties. Embrex primarily markets the Inovoject® system through lease arrangements with commercial poultry producers, charging a fee for each egg processed. The Company is also marketing the Egg Remover® system and Vaccine Saver® option to provide additional automation benefits to the poultry hatchery. The Egg Remover® system works alone or in conjunction with the Inovoject® system to remove infertile and early-dead eggs from incubator trays prior to transfer to the hatching incubator or inoculation through the Inovoject® system. The Vaccine Saver® option for the Inovoject® system identifies infertile and early-dead eggs and selectively prevents vaccination of these eggs.

In addition to the Inovoject® system and related devices, Embrex has developed an antigen-antibody complex technology (“AAC”), formerly known as VNF®, a concept that has been useful in the development of certain avian vaccines. Based on AAC, the Company has developed and is marketing Bursaplex® for protection against avian infectious bursal disease (“IBD”). The Company has developed Newplex™ for protection against Newcastle disease, which is also based on AAC technology. Embrex is also developing various other proprietary mechanical and biological products to improve bird health, reduce bird production costs and provide other economic benefits to the poultry industry, including Inovocox™ for protection against coccidiosis. These products are in various stages of development, and some are being developed or manufactured in collaboration with major animal health companies, federal agencies, major poultry producers and leading universities in the field of avian science. All biological products are designed for *in ovo* application.

## EXISTING PRODUCTS

### Inovoject® Egg Injection System and Other Devices

Embrex has developed and commercialized a proprietary, automated in-the-egg injection system, which can process 20,000 to 70,000 eggs per hour and eliminates the need for manual, post-hatch injection of certain vaccines. This proprietary system, called the Inovoject® system, is designed to inject vaccines and other compounds in precisely calibrated volumes into targeted compartments within the egg. Embrex primarily markets the Inovoject® system through lease arrangements with commercial poultry producers, charging a fee for each egg processed. Vaccines and other compounds injected using the Inovoject® system may be produced or distributed to the commercial poultry producers by Embrex, in which case Embrex receives additional compensation for such compounds. Currently, substantially all of the vaccines and other compounds injected using the Inovoject® system are supplied to producers directly by third parties.

In 2005, the Company installed the Inovoject® system in a number of hatcheries and continued operating Inovoject® systems in substantially all of the hatcheries converted prior to 2005. The Company estimates that its Inovoject® system inoculates approximately 85% of all eggs produced for the United States and Canadian broiler poultry markets, and it expects limited growth in the number of egg injections and only minor Inovoject® system revenue growth in this market. Therefore, the Company is expanding its Inovoject® system, Egg Remover® system and Vaccine Saver® option installations and vaccine product sales in worldwide markets to realize sustainable overall revenue growth. The Company estimates that approximately 75% or more of the world broiler production occurs outside the United States.

During 2005, the Company placed a number of Inovoject® systems for trial and on contract at locations outside the United States and Canada. Currently, the Company has Inovoject® systems either operating on contract or on trial in 34 countries, including the U.S. and Canada. Overall, the placement of Inovoject® systems outside the United States and Canada is dependent on market acceptance of various *in ovo* vaccines and obtaining regulatory approval of these vaccines in numerous countries.

The Company's revenues attributable to international operations in 2005, 2004 and 2003 were 37%, 34% and 32% of the Company's consolidated revenues, respectively. The Company's identifiable assets attributable to international operations in 2005, 2004 and 2003 were 23%, 22% and 18% of the Company's consolidated assets, respectively. The Company's gross profit attributable to international operations in 2005, 2004 and 2003 was 26%, 15% and 14% of the Company's consolidated gross profit, respectively. See "Segments" under Note 1 of "Notes to Consolidated Financial Statements" for further discussion of the Company's revenues from international operations. See "Our Future Growth Depends on Expansion of International Revenues and We Will Be Subject to Increased Risks in the International Marketplace" under Item 1A, "Risk Factors," for additional information on the risks associated with international operations.

Embrex developed the Egg Remover® system that works alone or in conjunction with the Inovoject® system to remove infertile and early-dead eggs from incubator trays. The Egg Remover® system continued to have commercial success with installation and revenue growth in all of the Company's marketing regions in 2005. The Company anticipates continued growth in Egg Remover® system revenues during 2006. Embrex's Vaccine Saver® option for the Inovoject® system identifies infertile and early-dead eggs and selectively prevents vaccination of these eggs. It is designed for use in select markets where vaccine prices are high.

Certain poultry diseases are more prevalent in some geographic regions than in others; and in those regions, the prevalence of particular diseases may fluctuate from year to year. For example, Marek's disease, for which the Inovoject® system primarily is used in the United States, is not as widespread in Europe as in North America. Infectious bursal disease (also known as Gumboro disease) is prevalent in Northern Europe, the Middle East, Asia, parts of Latin America and, to a lesser extent, the United States. The Company expects that the primary usage of its Inovoject® systems will vary by geographic region according to the prevailing diseases. Regulatory approval and market acceptance of vaccines for *in ovo* delivery are other factors that affect the usage of Inovoject® system by region. There are a number of poultry vaccines and other compounds marketed by various animal health companies in the United States and other markets that can be used with the Inovoject® system or post-hatch. Usage of the Inovoject® system, Egg Remover® system and Vaccine Saver® option is influenced by the relative cost and demand for these vaccines, customer willingness to use *in ovo* delivery of vaccines, as well as willingness to replace post-hatch vaccines with *in ovo* vaccines.

Device revenues from the Company's Inovoject® system, Egg Remover® system and Vaccine Saver® option were \$48.7 million, \$46.2 million and \$43.5 million during 2005, 2004 and 2003, respectively.

## AAC Technology (Antigen-Antibody Complex Technology)

AAC technology is a concept that allows safe *in ovo* administration of moderately attenuated viruses. By using the AAC technology to form virus-antibody complex vaccines, safe and effective immunization is generally possible in a single step, thus reducing or eliminating the need for multiple vaccinations. The presence of the antibody delays onset of virus replication without compromising the virus's ability to stimulate the immune system. Prior to 2004, Embrex referred to the AAC technology as virus neutralizing factor, or VNF®. The Company believes AAC more accurately describes the technology and has used that terminology since 2004.

The AAC technology is the subject of five issued U.S. patents and several foreign patents and foreign patent applications. The U.S. patents are owned by the University of Arkansas and exclusively licensed to Embrex for avian use on a royalty basis for the life of the patents. See "Patents and Proprietary Rights" below for additional information on the Company's AAC patents. The Company's vaccine for infectious bursal disease, Bursaplex®, and the Company's Newcastle disease vaccine, Newplex™, described below, were developed based on the AAC technology.

### Infectious Bursal Disease ("IBD") Vaccine - Bursaplex®

AAC technology has been used in the Company's Bursaplex® vaccine, which combats IBD, an infectious disease that weakens a bird's immune system. Birds infected by IBD virus typically exhibit poor growth or can succumb to other diseases because of a compromised immune system. This disease is currently widespread in Northern Europe, the Middle East, Asia, Latin America and, to a lesser extent, the United States. Various existing IBD vaccines can be administered *in ovo*, post-hatch via day of age injection or by drinking water. The Company estimates the worldwide market for IBD vaccines is approximately \$55 million annually.

To date, approval to sell Bursaplex® has been received in 33 countries. Currently, Bursaplex® vaccine is being marketed in most of the countries where regulatory approval has been obtained. Pending regulatory approvals are being sought in Latin American, Middle Eastern and Asian markets for *in ovo* and post-hatch use of Bursaplex® vaccine.

### Newcastle Disease ("ND") Vaccine - Newplex™

The registration application for Newplex™, Embrex's *in ovo* vaccine that immunizes against ND, was also developed based on AAC technology and received U.S. Department of Agriculture ("USDA") approval in May 2003. ND is a contagious and sometimes fatal viral respiratory disease affecting all species of birds. Birds infected with ND typically exhibit respiratory problems, lower egg production and increased flock mortality. Currently, ND vaccines containing live or dead viruses are used as an important part of the programs to manage ND. These vaccines are typically administered by several methods including spray cabinets in the hatchery, drinking water, eye drop and hand-held sprayers in the field. To date, approval to sell Newplex™ has been received in nine countries. Embrex is pursuing additional approvals for Newplex™ in key markets worldwide, particularly in Asia, Latin America, the Middle East and South Africa, where ND is more prevalent. Although this product has received approval for sale in countries outside the U.S., there is no assurance that approvals in other markets will be granted, that supplies will be available or that Newplex™ will be sold in commercial quantities in the U.S. or in any of the other countries where approval has been obtained. The Company estimates that the worldwide market for products that control ND is approximately \$40 million per year.

## PRODUCTS UNDER DEVELOPMENT

Embrex is developing, independently and in collaboration with others, additional products and devices which address poultry health and performance needs *in ovo*. These additional products are in various stages of development. There can be no assurance that Embrex will successfully develop or market any of these products. Also, there is no assurance regulatory approval will be obtained. Marketing products developed jointly with others may require royalty or other payments by Embrex to its co-developers.

### Coccidiosis Vaccine – Inovocox™

The Company is developing a novel *in ovo* vaccine, Inovocox™, for immunization against coccidiosis. Coccidiosis is caused by a protozoan parasite, which attacks the gut of the chicken, causing significant problems with intake and digestion of feed and, therefore, the physical and economic performance of the bird. Currently, virtually all broiler chickens, and most poultry in general, receive treatments using compounds called anticoccidials, which are incorporated into poultry feed. Over the years, coccidia have developed levels of resistance to many of these

compounds, which have not only reduced their effectiveness, but have forced the poultry industry to continually evaluate and modify treatment programs. Additionally, in certain countries and regions, environmental and food safety groups are lobbying to have anticoccidials removed from the market. Embrex believes that these factors will lead to a change in the market such that coccidiosis vaccines will be favored over anticoccidials, but there is no assurance that such a change will occur. Currently, a limited number of live vaccines have been developed and are administered orally soon after hatch. However, due to difficulties in providing a precise oral dose to each bird, growth depression and non-uniformity can occur in broiler flocks. Using its Inovoject® system technology and its knowledge of avian embryology, the Company is developing a novel, efficacious and cost-effective vaccine for coccidiosis control in broiler chickens. This program is aimed at overcoming many of the problems associated with current practices. The Company estimates that the worldwide market for products that control coccidiosis is approximately \$300-350 million per year.

In March 2004, Embrex substantially completed construction of a \$14.7 million coccidiosis vaccine manufacturing facility located in Scotland County, North Carolina for the purpose of manufacturing Inovocox™. USDA approval will be necessary for both the Inovocox™ vaccine and the coccidiosis vaccine manufacturing facility. In December 2005, the Company submitted its application to the USDA for approval of the Inovocox™ vaccine. Delays in obtaining either the vaccine or manufacturing facility approval may adversely affect the marketing of and the ability to receive revenues from Inovocox™. Marketing this product outside the U.S. will also require Embrex to pursue separate approvals from regulatory agencies in other countries. See "Production—Inovocox™ *In Ovo* Coccidiosis Vaccine" below for further discussion of Inovocox™ production.

#### Gender Sorting Device

As previously announced during the second quarter of 2005, Embrex determined to scale back its efforts to automate avian gender sorting. Embrex believes that the market opportunity for its gender sorting technology is substantial, and that steady progress has been made on a very complex project, with key targets achieved in sampling, hatch and assay on a laboratory basis and limited egg numbers in its multi egg prototype. However, the cost and time associated with scale-up to a commercial device and process remain unclear. After weighing the opportunities provided in the near term by Embrex's vaccine market, the Company's current and future investment on Inovocox™, and international expansion, particularly in Latin America, against the uncertainty of successful commercialization of Gender Sort, Embrex believes it is in the Company's best interests to suspend this project for the time being so that Embrex can focus its efforts and financial resources on those other opportunities. Embrex will continue to monitor technological developments potentially applicable to Gender Sort and will reevaluate Gender Sort's financial prospects from time to time as compared to the Company's other opportunities.

The Company's financial statements in Item 8 reflect the impact of a Credit Agreement with Advanced Automation, Inc. ("AA") of Greenville, S.C., which Embrex entered into in April 2001. Under that agreement, Embrex agreed to loan AA up to \$3.4 million in connection with development and construction of a gender sorting automation multi-egg system ("Gender Sort system"). The Company also entered into a Development and Supply agreement with AA in September 2001 and a Services Agreement in April 2003. In April 2003, Embrex and AA agreed to rollover the \$2.5 million outstanding principal and accrued interest under the Credit Agreement that had matured April 1, 2003 into a seven-year 6% fixed-rate collateralized term loan (the "Term Loan"). Subsequently, in December 2003, the Company acquired the first Gender Sort system developed exclusively for Embrex by AA for \$2.3 million, AA repaid the Term Loan in the same amount and the related Services Agreement between Embrex and AA to build the first Gender Sort system was terminated. A related Development and Supply Agreement between the two companies remains in effect. The Company accounted for the purchase of the Gender Sort system as a write-down and recorded it as a research and development expense of \$2.3 million.

#### PATENTS AND PROPRIETARY RIGHTS

Embrex controls (either through direct ownership or exclusive license) 47 issued U.S. patents, 15 pending U.S. patent applications, 174 issued foreign patents and 100 pending foreign patent applications. The Inovoject® system utilizes a process of injecting viral, bacterial or fungal vaccines into avian eggs that was patented in the United States by the USDA in 1984 (the "Sharma Patent"). Embrex held the exclusive license to this patent through its expiration in June 2002. Embrex has supplemented this process with seven additional issued U.S. patents (and numerous foreign patents and patent applications) covering specific design features of the Inovoject® system as well as Embrex's Egg Remover® system and Vaccine Saver® option. The last of these patents will expire in 2018.

Embrex has exclusive rights to method-of-use patents for the *in ovo* administration of AAC vaccines and other compounds to elicit various beneficial responses in poultry. The AAC technology is the subject of five issued U.S. patents and numerous foreign patents and foreign patent applications. These patents and applications are owned by the University of Arkansas and exclusively licensed to Embrex for avian use on a royalty basis for the life of the

patents. The last of these U.S. patents for AAC viral vaccines will expire in 2012. Of these U.S. patents, one was issued in 1991 and two were issued in 1995 for methods of treating IBD virus infections using AAC technology, including *in ovo* administration; one patent claiming the use of AAC vaccines in non-human primates was issued in 1999; and a further U.S. patent claiming use of AAC vaccines in any animal was issued in 2001. These patents and additional patent applications encompass the use of AAC vaccine compounds regardless of the source of the AAC. These AAC patents and patent applications additionally include composition-of-matter claims to AAC vaccines against IBD virus disease, and composition-of-matter claims to AAC vaccines for combating viral diseases in any animal.

The Company acquired an exclusive worldwide license from Pfizer, Inc. ("Pfizer") to three patent families owned by Pfizer that cover the process of vaccination *in ovo* against coccidiosis. Two patents were issued in the European Union in March and June 2001, two were issued in the United States in December 2002, and two further patents were issued in the United States in September 2003 and January 2006. Embrex made initial payments to Pfizer in 2004 to acquire the license and is obligated to make future royalty payments to Pfizer based on actual product sales. Since then, Embrex has filed patent applications related to additional process improvements in vaccine production. Continued development of the product has demonstrated that Inovocox™ can be simultaneously delivered to the embryo with Marek's disease vaccine or Bursaplex® bursal disease vaccine. Additionally, the vaccine is delivered uniformly due to the use of the Inovoject® system.

Embrex continues its efforts to patent methods of delivering compounds *in ovo*, including early intervention methods and devices. During the years 2000 through 2005, 30 U.S. patents were issued or allowed, further expanding Embrex's proprietary position with respect to *in ovo* technology. The Company filed nine new U.S. patent applications in 2002, nine new U.S. patent applications in 2003, three new U.S. applications and nine U.S. provisional patent applications in 2004 and six new U.S. patent applications and eight U.S. provisional patent applications in 2005. During 2005, Embrex also filed numerous foreign patent applications. Each application covered various aspects of *in ovo* technology. Embrex's competitors or potential competitors may have filed for, or may have received, U.S. and foreign patents and may obtain additional patents and proprietary rights relating to *in ovo* technology, vaccines, uses or processes that may compete with Embrex's existing products and products under development. Accordingly, there can be no assurance that Embrex's patent applications will result in patents being issued or that, if issued, the claims of the patents will afford protection against competitors with similar technology; nor can Embrex be sure that others will not obtain patents that Embrex would need to license or circumvent in order to practice Embrex's inventions.

In addition to patent rights, Embrex has registered the trademarks Embrex®, Inovoject®, VNF®, Bursaplex®, Vaccine Saver®, Egg Remover®, and The In Ovo Company®, in the United States and certain foreign countries. Embrex has also applied for U.S. and several foreign registrations of other trademarks and service marks including Newplex™, Inovocox™ and Inovometrix™. In addition, Embrex has executed confidentiality agreements with its collaborators, subcontractors and employees.

See "Competition" below and Item 3, "Legal Proceedings," below for further discussion of the Company's efforts to use its patents and proprietary rights to protect its market position.

## COMPETITION

The Company estimates that its Inovoject® system inoculates approximately 85% of all eggs produced for the U.S. and Canadian broiler poultry markets. In addition, the Company has Inovoject® systems either operating on a contract or trial basis in 32 additional countries. The competition for the Inovoject® system primarily is the manual, post-hatch administration of biological products, which was the primary method of administration prior to market acceptance of the Inovoject® system. Post-hatch administration remains the primary method of delivery of biological products in many foreign markets. In addition, Embrex is aware of four companies that are marketing *in ovo* injection systems to poultry companies. Although there has not been widespread commercial acceptance of any of these competing systems, the Company is aware of direct competition for customers and limited commercial placements by some of these companies, including with some of our customers. Embrex believes that it will continue to compete effectively against other companies based on performance of products, pricing, quality, product features and customer service. In order for the Company to expand placements of the Inovoject® system worldwide, the Inovoject® system and *in ovo* products must continue to be accepted within the foreign markets and perform as intended under long-term commercial conditions.

The Inovoject® system utilizes a process that was patented in the United States by the USDA in 1984. Embrex held the exclusive license to this Sharma Patent until June 2002, when the Sharma Patent expired. Embrex owns seven additional issued U.S. patents and numerous foreign patents covering specific design features of the Inovoject® system as well as Embrex's Egg Remover® system and Vaccine Saver® option. Embrex relies on these patents to

protect its intellectual properties and to afford a competitive advantage. In the event that Embrex believes that a competitive system infringes any Embrex patent, the Company plans to take all appropriate steps to protect its patent rights. These matters are discussed in more detail under "Patents and Proprietary Rights" above and Item 3, "Legal Proceedings," below.

The majority of Embrex's revenues are derived from lease fees received from commercial poultry producers for use of its Inovoject® system, rather than from sales of Embrex's vaccines. In marketing its vaccines, the Company competes with much larger animal health companies that typically market a broad range of vaccines and other animal products. Embrex's strategy is to develop and market *in ovo* delivered vaccines which compete effectively against other vaccines based on factors such as efficacy and cost-effectiveness. Competition for the Company's *in ovo* vaccines comes primarily from vaccines that are administered post-hatch. Embrex's Bursaplex® vaccine for IBD primarily competes with vaccines that are administered post-hatch either manually through injections or in drinking water. Newplex™, Embrex's vaccine for Newcastle disease, is designed to compete with vaccines that are administered through drinking water, eye drop or spraying. Embrex's Inovocox™ vaccine for coccidiosis, for which USDA approval is pending, would compete with anticoccidials that are incorporated into poultry feed and to a lesser extent with vaccines that are administered after hatch. The Company completed construction of a vaccine manufacturing facility for Inovocox™ in March 2004. Embrex believes that the marketplace is developing such that sales of coccidiosis vaccines could grow, but there is no assurance that this will occur or that Embrex will obtain necessary regulatory approvals for Inovocox™ and the manufacturing facility. Overall, in order for the Company to expand sales of its *in ovo* vaccines, these vaccines must obtain necessary regulatory approvals and be commercially accepted worldwide, and the Inovoject® system must also continue to be accepted in the marketplace.

## PRODUCTION

### General

Embrex currently outsources production of nearly all its mechanical devices and vaccines and expects to continue to do so for the foreseeable future. The Company believes that alternative sources of manufacturing and supply generally exist for products currently manufactured for Embrex by contract manufacturers. In addition, the Company expects to begin to manufacture Inovocox™ in its Embrex Poultry Health LLC coccidiosis vaccine manufacturing facility in Scotland County, North Carolina, once the USDA approves the Inovocox™ vaccine and grants facility licensure to manufacture Inovocox™.

### Inovoject® System, Egg Remover® System and Vaccine Saver® Option

Embrex's in-house engineering staff designs the Inovoject® system, Egg Remover® system and Vaccine Saver® option, which incorporate certain proprietary mechanical, pneumatic and electronic sub-systems and concepts. The Company uses one contract manufacturer, Precision Automation Company, Inc. ("Precision"), to fabricate its Inovoject® and Egg Remover® systems. While other machine fabricators exist and have constructed limited numbers of these devices, a change in fabricators could cause a delay in manufacturing and a possible delay in the timing of future Inovoject® and Egg Remover® system installations and revenues from those installations. The Vaccine Saver® option is assembled in the manufacturing area at the Company's corporate headquarters from components that are purchased from multiple vendors.

### AAC Vaccines (Antigen-Antibody Complex Vaccines)

Since 1993, Charles River Laboratories, Inc., through its SPAFAS Avian Products Services Division ("SPAFAS"), has supplied Embrex with the bursal disease antibody ("BDA") component for Bursaplex® vaccine. In January 2004, Embrex signed a new agreement with SPAFAS under which SPAFAS will continue to supply the Company's requirements for BDA through 2006. In connection with this agreement, Embrex seeks to maintain appropriate inventory levels and places orders with SPAFAS to allow Embrex to satisfy anticipated customer demand for the Bursaplex® vaccine. The regulatory approval granted by the USDA for Bursaplex® vaccine in 1997 specifically covers vaccines produced with SPAFAS-manufactured BDA. Additional agreements covering the Company's needs for Newcastle disease antibody ("NDA") for the Company's Newplex™ vaccine for the next four years are in negotiation with SPAFAS.

The Company has a non-exclusive manufacturing agreement with Merial Select, Inc. ("Select") (a Merck and Sanofi-Aventis company) under which Select manufactures, in the United States, the Company's Bursaplex® vaccine for Embrex to market worldwide. Abic Ltd. ("Abic") has been granted similar rights to manufacture and market an IBD AAC vaccine, known as GuMBryo™, in Israel. The Company has also granted Lohmann Animal Health International ("LAHI") non-exclusive rights to manufacture the Company's Newcastle vaccine, Newplex™, in the United States, which is based on Embrex's AAC technology. The manufacture of vaccines by Select, Abic

and LAHI, along with the manufacture of specific vaccine antibodies by SPAFAS, generally must be performed in licensed facilities or under approved regulatory methods. Although the Company believes that there are other manufacturers who should be capable of manufacturing Bursaplex®, Newplex™ and the related BDA and NDA components, a change of supplier for the Company could adversely affect Embrex's future operating results due to the time it would take a new supplier to obtain regulatory approval of its production process or manufacturing facilities. The Company seeks to minimize this exposure through multi-year supply agreements and the maintenance of appropriate inventories.

#### **Inovocox™ *In Ovo* Coccidiosis Vaccine**

In March 2004, the Company substantially completed construction of a coccidiosis vaccine manufacturing facility located in Scotland County, North Carolina, at a cost to date of \$14.7 million. The facility is designed to manufacture the Company's Inovocox™ *in ovo* coccidiosis vaccine upon approval from the USDA. The site includes a main manufacturing facility, poultry brooder houses and a facility for the initial steps of the production process. Certain aspects of the novel manufacturing process are unique and proprietary to Embrex.

See "Products Under Development—Coccidiosis Vaccine—Inovocox™" above for further discussion of Inovocox™.

### **MARKETING AND DISTRIBUTION**

Because of the geographical and industrial concentration of the poultry industry in the United States and other global markets, Embrex markets its products and provides ongoing service directly to commercial poultry producers. Embrex's marketing is focused principally on the broiler chicken segment of the poultry industry, but the Company also has adapted its products for use by, and initiated trials and entered into commercial contracts with, broiler breeder companies and a limited number of layer and turkey producers. Market acceptance of the Inovoject® system generally follows the large-scale integration of poultry production in a market. Therefore, the Company generally focuses on customers in markets that are currently integrating poultry production or have the potential to do so. In addition, the Inovoject® and Egg Remover® systems have been marketed to human flu vaccine producers, who use the systems to inject influenza seed strains into eggs that are used in the flu vaccine production process and to candle eggs before injection.

To protect the Company's intellectual property, address customer needs and encourage proper use of the Inovoject® system technology within an appropriate production environment, Embrex generally leases and licenses, rather than sells, Inovoject® and Egg Remover® systems and the Vaccine Saver® option to hatcheries. The lease agreements cover the use of the mechanical equipment and ongoing field service, maintenance and technical support provided by Embrex. The agreements include a license with royalty fees payable for use of Embrex's proprietary injection process. Also, in a very limited number of markets, under specific circumstances, Embrex may sell the Inovoject® and Egg Remover® systems to a distributor or to a human flu vaccine manufacturer. Vaccines and other compounds, which are delivered *in ovo*, are sold separately by Embrex, and also by third parties.

The Company has agreements with parties to distribute the product in a number of countries in which regulatory approval for Bursaplex® has been granted. Subject to these distribution agreements, the Company will also distribute Bursaplex® directly, outside the United States.

Embrex has expanded operations into selected Asian and Latin American markets and installed Inovoject® systems on a commercial or trial basis into these markets. In 1998, Embrex established Embrex BioTech Trade (Shanghai) Co., Ltd. in China, to focus on marketing and distribution of Embrex products in China. Also in 1998, Embrex established Embrex Inc. Sucursal Argentina, a branch office in Argentina, responsible for commercial development and customer service and support. In 1999, Embrex established a subsidiary in Brazil, Inovoject do Brasil Ltda. In 2001, Embrex established subsidiaries in France and Spain to market and service Inovoject® systems in those countries. In 2004, the Company established an office in Mexico and began marketing, servicing and supporting Inovoject® systems and other devices. This office is also responsible for marketing Bursaplex® and initiating the registration process for Newplex™ in Mexico.

### **RESEARCH AND DEVELOPMENT EXPENDITURES**

Research and development ("R&D") expense was \$12.5 million in 2003, \$10.5 million in 2004 and \$10.7 million in 2005. The increase in R&D expense from 2004 to 2005 was due primarily to higher Embrex Poultry Health expenses related to pre-licensing serials of Inovocox™, while the decrease in R&D expense from 2003 to 2004 largely reflects the write-down of the Gender Sort system purchased from AA, which increased R&D expenses by \$2.3 million in 2003. R&D is principally Company sponsored and funded primarily from internal sources and



supplemented by grant and other sources of funds as appropriate. The Company's R&D expenses include expenditures from the following groups: R&D, which is responsible for the work on the Company's product portfolio, particularly the Newplex™ and Inovocox™ vaccines; Global Product Development & Supply, which is responsible for development and testing of commercial machine devices and supply of vaccine products, including start-up of the Embrex Poultry Health manufacturing facility for the production of Inovocox™; and finally Engineering and Manufacturing, which makes design modifications and improvements to the Company's devices, as well as final assembly and testing prior to installation of a Company device at a customer's hatchery. See "Products Under Development" above for further discussion of the Company's research and development efforts.

See "Operating Expenses" under Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," for additional information on R&D expenditures.

## **GOVERNMENTAL APPROVALS AND REGULATION**

Regulation by governmental authorities in the United States and other countries is a significant factor in the production and marketing of Embrex's products and in its on-going R&D activities. Although the use of the Inovoject® system or its other devices are not subject to regulatory approval in the United States, animal health products being developed by Embrex and other companies must receive approval for marketing from either the USDA or the Food and Drug Administration (the "FDA") and from similar regulatory agencies in foreign countries where the Company has begun or contemplates doing business. These countries also may require approval of the Inovoject® system or its other devices. Regulatory agencies require that products be tested and demonstrate appropriate levels of safety and efficacy. Generally, with respect to animal health products in the United States, the USDA has regulatory authority over products which are biological in origin or which stimulate or affect an animal's immune system and the FDA has authority over all other animal health products. The time and cost for USDA approvals are generally less than those for FDA approvals. FDA approvals generally require more extensive animal and toxicology testing than USDA approvals and may take five or more years to obtain, whereas USDA approvals generally take one to three years to obtain. In December 2005, the Company submitted its application to the USDA for approval of the Inovocox™ vaccine. The Company currently has no products under development that would require approval by the FDA.

The Company believes that compliance with environmental regulations currently has no material adverse effect on its capital expenditures, earnings or competitive position.

## **EMPLOYEES**

At December 31, 2005, Embrex employed 309 persons, 304 of whom were full-time employees, an increase of 3 persons or 1% from the 301 full-time employees at December 31, 2004.

During 2005, the Company increased field service staffing levels related to expanding device installations, especially in Latin America. Similarly, the Company increased production staffing levels at its Inovocox™ manufacturing facility. The Company, however, has maintained or reduced staffing levels elsewhere in conjunction with managing mandated expenses and redefined R&D priorities.

## **SIGNIFICANT CUSTOMERS**

Tyson Foods, Inc. ("Tyson") accounted for approximately 17% of Embrex's consolidated 2005 revenues. Based on millions of pounds of ready-to-cook poultry meat produced in 2005, Tyson accounted for approximately 23% of the broilers grown in the United States. The only other customer representing greater than 10% of total consolidated revenues is Pilgrim's Pride Inc. ("Pilgrim's"), representing 11% of consolidated 2005 revenues. Pilgrim's accounted for approximately 15% of the broilers grown in the United States, based on millions of pounds of ready-to-cook poultry meat produced in 2005. Embrex's three largest customers, including Tyson and Pilgrim's, accounted for approximately 33% of consolidated 2005 revenues, down from 36% and 37% in 2004 and 2003, respectively. Revenues from Tyson and Pilgrim's are primarily associated with the United States operations of Embrex's business.

## **AVAILABLE INFORMATION**

Embrex maintains an Internet website, [www.embrex.com](http://www.embrex.com), which contains additional information concerning the Company. Although the Company endeavors to keep its Internet website current and accurate, there can be no guarantees that the information on the Internet website is up to date or correct. Embrex makes available free of charge through its Internet website its annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports

on Form 8-K, amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and beneficial ownership reports filed by officers, directors and principal security holders under Section 16(a) of the Securities Exchange Act of 1934 as soon as reasonably practicable after Embrex electronically files such material with, or furnishes it to, the Securities and Exchange Commission ("SEC"). Information on the Company's Internet website is not part of or incorporated into this report on Form 10-K.

#### **ITEM 1A. RISK FACTORS**

If any of the following risks occur, our business, financial condition or results of operations could be materially adversely affected.

##### ***OUR FUTURE GROWTH DEPENDS ON EXPANSION OF INTERNATIONAL REVENUES AND WE WILL BE SUBJECT TO INCREASED RISKS IN THE INTERNATIONAL MARKETPLACE***

We estimate that our Inovoject® system inoculates approximately 85% of all eggs produced for the U.S. and Canadian broiler poultry markets. Given this market penetration, we expect only limited growth in the number of system installations and only minor system revenue growth in this market. Additionally, due to our market penetration and the significance of the U.S. and Canadian poultry markets to our revenue, any adverse conditions in these markets could have a material and adverse effect on our revenues. For this reason, we must expand our device installations and product sales in markets outside the United States and Canada in order to realize revenue growth. In 2005, international sales accounted for 37% of our consolidated revenues. In 2004 and 2003, international sales accounted for 34% and 32% of our consolidated revenues, respectively. Revenue growth outside the United States and Canada depends on gaining and preserving market acceptance of our devices and *in ovo* administration of vaccine products in markets outside the United States and Canada to treat prevailing poultry diseases in those markets. Lack of market acceptance of our devices and *in ovo* products in these markets would materially adversely affect our revenue growth. Our operating expenses associated with operations outside the United States and Canada historically have been relatively higher as a percentage of revenues than similar costs for operations inside the United States and Canada. Accordingly, we believe that international sales may result in decreased gross margins for Embrex.

International sales are also subject to a variety of risks, including risks arising from the following:

- exchange rate risks (including risk associated with the translation of our subsidiaries' financial results into U.S. Dollars and transaction risk), tariffs, trade barriers and taxes;
- adverse changes in local investment or exchange control regulations, potential restrictions on the flow of international capital and the possibility of confiscatory taxation, price controls or the taking or modification of our property rights by a country in the exercise of its sovereignty;
- economic and political conditions beyond our control, including country-specific conditions such as political instability, government corruption and civil unrest;
- the risk that we may not be granted a renewal license due to regulatory changes or other reasons with respect to current product registrations in certain foreign countries that are subject to periodic re-registration; and
- trade restrictions and economic embargoes imposed by the United States and other countries.

##### ***OUR FUTURE GROWTH ALSO DEPENDS ON THE DEVELOPMENT AND MARKET ACCEPTANCE OF NEW PRODUCTS***

In addition to international expansion, we need to develop and market new products to continue to generate increased revenues and growth of our business. We currently are developing, both independently and in collaboration with others, various products that address poultry health and performance needs. These products are being designed to be delivered *in ovo* through the Inovoject® system or in conjunction with the Inovoject® system and are in various stages of development. We may increase, decrease or eliminate funding for any product under development at any time depending on our assessment of our priorities, available funding, the probability that the product can be successfully commercialized, potential return on investment and other factors. There is no guarantee that any new products will be successfully developed and marketed. In addition, we have not initiated the regulatory approval process for some of these potential products, and we cannot assure you that regulatory approval will be obtained. Our inability to develop new products or any delay in our development of these products may materially adversely affect our revenue growth. Because of a number of factors, a new product may not reach the market

without lengthy delays, if at all. Some of the factors that may affect our development and marketing of new products include the following:

- our research and evaluations of compounds and new technologies may not yield product opportunities;
- potential products may involve extensive and time-consuming clinical trials to demonstrate safety and effectiveness, and the results of such trials are uncertain;
- potential products may require collaborative partners and we may be unable to identify partners or enter into arrangements on terms acceptable to us;
- we may not be able to produce or contract for the manufacture of new products at a cost or in quality or quantities necessary to make them commercially viable;
- domestic and international regulatory approval of these products may not be obtained or may be obtained only with lengthy delays;
- we may not be able to secure additional financing that may be needed to bring a potential product to market;
- we may experience unexpected safety, regulatory or efficacy concerns with respect to marketed products, whether or not scientifically justified, leading to adverse public reaction, product recalls, withdrawals or declining sales;
- marketing products developed jointly with other parties may require royalty payments or other payments by us to our co-developers, which may materially adversely affect our profitability;
- we may be unable to accurately predict market requirements and evolving standards; and
- we may not be able to attract and retain sufficient numbers of qualified development personnel.

We have developed and commercialized two devices that work with the Inovoject® system: the Egg Remover® and Vaccine Saver®. The Egg Remover® can also be used without an Inovoject® system in specific situations where customers do not need injection services. These two devices have had initial success; however, there is no guarantee that acceptance of these devices will continue to grow.

In December 2005, we filed for USDA regulatory approval with respect to our *in ovo* coccidiosis vaccine, Inovocox™. Although this product is in the regulatory review process, there is no assurance that USDA approval will be obtained. Marketing this product in non-U.S. countries will require us to pursue separate approvals from foreign regulatory agencies. We completed construction of a vaccine manufacturing facility, Embrex Poultry Health, in the first quarter of 2004 to commercially produce the Inovocox™ vaccine. Construction costs for Embrex Poultry Health to date are approximately \$14.7 million. In addition to USDA approval for Inovocox™, our coccidiosis vaccine manufacturing facility must receive a separate USDA approval to manufacture the Inovocox™ vaccine. We cannot assure you that the facility will receive USDA approval to manufacture Inovocox™. Delays in obtaining either product or manufacturing facility approvals may materially adversely affect our marketing of, and our ability to receive revenues from, Inovocox™. Additionally, even if we receive USDA product and facility approvals, we cannot assure you that Inovocox™ supplies will be available, that Inovocox™ will be sold in commercial quantities or that product sales will be sufficient to offset our investment in development of the product and construction of the Inovocox™ vaccine manufacturing facility.

We have developed and commercialized AAC, which is technology that we use in our Bursaplex® vaccine. Bursaplex® has been sold in commercial quantities during the past six years, and we currently have approval to sell it in 33 countries. However, there is no assurance that supplies will continue to be available or that the product will continue to be sold in commercial quantities.

In May 2003, the USDA provided regulatory approval of Newplex™, our *in ovo* Newcastle Disease vaccine, within the United States. Newplex™ vaccine is also based on AAC technology. We are now seeking regulatory approval for Newplex™ in key markets worldwide. Although we have received approval to sell Newplex™ in nine countries, there is no assurance that approvals in other markets will be granted, that supplies will be available or that Newplex™ will be sold in commercial quantities in the United States or in any of the other countries where approval has been obtained.

There can be no assurance that we will successfully complete the development and commercialization of any new products, or that any of these new products will meet revenue and profit expectations if developed and commercialized.

## ***ECONOMIC FACTORS AFFECTING OUR CUSTOMERS MAY ADVERSELY AFFECT OUR FINANCIAL RESULTS***

Our revenues principally come from leases and sales to the poultry industry. If there is a general economic decline in that industry, our operations and financial condition could be materially and adversely affected. Also, domestic and global economic factors beyond our control may adversely impact our customers and, as a result, our revenues and earnings. Examples of these factors include the following:

- fluctuations in the prices of energy and poultry feed;
- disease outbreaks that adversely affect poultry production, including avian influenza;
- market demand for poultry products, including the supply and pricing of alternative proteins;
- costs to comply with applicable laws and regulations, including those relating to environmental protection, food safety, market regulation and genetically modified organisms or ingredients;
- product recalls and related adverse publicity and consumer reaction;
- access to foreign markets together with foreign economic conditions, including currency fluctuations and trade restrictions; and
- the extent to which our cost of products and operating expenses increase faster than contractual price adjustments with our customers.

For example, if rising poultry feed prices increase the production costs of commercial poultry producers or a foreign government bans the importation of U.S. chicken, these producers may reduce poultry production. This decreased production could adversely impact our revenues, since a principal component of our revenues are fees charged to customers for the number of eggs injected or processed by Embrex devices.

## ***WE FACE RISKS OF COMPETITION AND CHANGING TECHNOLOGY***

The Inovoject® system uses a process that was patented in the United States by the USDA in 1984. We held the exclusive license to the Sharma Patent until June 2002, when the Sharma Patent expired. With the expiration of the Sharma Patent, competitive *in ovo* delivery systems are being developed and marketed. Embrex is aware of four companies that are marketing *in ovo* injection systems to poultry companies. Although there has not been widespread commercial acceptance of any of these competing systems, we are aware of direct competition for customers and limited commercial placements by some of these companies, including with some of our customers. Increased competition could result in lower prices for our products, reduced demand for our products and a corresponding reduction in our ability to recover development, engineering, manufacturing and service costs. Also, a significant portion of our revenues comes from a relatively small number of customers. If we lose one or more large customers due to competition, our revenues could be significantly lower. Any of these developments could have a material adverse effect on our business, results of operations and financial condition.

The poultry vaccine business is especially competitive and dominated by a few large companies with an established global presence. In order for us to expand our sales of *in ovo* vaccines, these products must be commercially accepted worldwide and compete effectively against the vaccines of these other companies. Our inability to compete successfully in the poultry vaccine sector could materially adversely affect our revenue growth. Our competitors and potential competitors include independent companies that specialize in biotechnology, as well as major agricultural or animal health companies, pharmaceutical companies, chemical companies, universities and public and private research organizations. Many of these competitors are well established and have substantially greater marketing, financial, technological and other resources than we have. Competitors may succeed in developing technologies and products that are more effective than any that have been or are being developed by us or that could render our technology and products obsolete or non-competitive.

## ***THE LOSS OF KEY CUSTOMERS COULD ADVERSELY AFFECT OUR FINANCIAL RESULTS***

Historically, a significant portion of our revenues has come from a relatively small number of customers. Tyson accounted for approximately 17% and 18% of our consolidated 2005 and 2004 revenues, respectively. The only other customer representing greater than 10% of total consolidated revenues is Pilgrim's, representing 11% and 12% of consolidated 2005 and 2004 revenues, respectively. As with many of our customers, we have short-term contracts with Tyson and Pilgrim's. Our top three customers, including Tyson and Pilgrim's, accounted for approximately 33% and 36% of our consolidated 2005 and 2004 revenues, respectively. We expect a similar level of customer concentration to continue in future years. The poultry market is highly concentrated, with the largest

poultry producers dominating the market. For example, in 2005, Tyson and Pilgrim's supplied approximately 23% and 15% of all broilers grown in the United States, respectively. The concentration of our revenues with these large customers means factors affecting those customers also will impact our revenues and earnings. If we lose a large customer and fail to add new customers to replace lost revenues, our operating results will be materially and adversely affected. Also, if these customers reduce the number of eggs they incubate at hatcheries, we will receive lower device revenues since our fees are based on the number of eggs injected.

### ***IF WE LOSE THE PROTECTION OF OUR PATENTS AND PROPRIETARY RIGHTS, OUR FINANCIAL RESULTS COULD SUFFER***

#### **Importance and Limitations of Patent and Proprietary Rights Protections**

Some of our products and processes used to produce our products involve proprietary rights, including patents. We own some of the technologies employed in these processes, and some are owned by others and licensed to us. The Inovoject® system utilizes a process that was patented by the USDA in the United States. We held an exclusive license to the Sharma Patent until it expired in June 2002. We have supplemented the Sharma Patent with additional U.S. and foreign patents and have submitted additional patent applications covering specific design features of the Inovoject® system, as well as Embrex's Egg Remover® system and Vaccine Saver® option. Our competitors or potential competitors may have filed for or received United States and foreign patents and may obtain additional patents and proprietary rights relating to *in ovo* technology, vaccines, uses and/or processes which may compete with our existing products and our products under development. Accordingly, we cannot assure you that our patent applications will result in patents being issued or that, if issued, the claims under our patents will afford protection against competitors with similar technology. We cannot be sure that others will not obtain patents of different technology that we would need to license or circumvent in order to practice our inventions. Even though we strive to take appropriate action to protect our intellectual property, there is a risk that competitive systems currently being developed and marketed could gain acceptance in the United States or elsewhere.

We believe that patent protection of materials or processes we develop and any products that may result from the research and development efforts of our licensors and us are important to the commercial success of our products. The loss of the protection of these patents and proprietary rights could materially adversely affect our business and our competitive position in the market. The patent position of companies such as ours generally is highly uncertain and involves complex legal and factual questions. Some of the reasons for this uncertainty include the following:

- To date, no consistent regulatory policy has emerged regarding the breadth of claims allowed in biotechnology patents. Consequently, there can be no assurance that patent applications relating to our products or technology will result in patents being issued or that, if issued, the patents will afford protection against competitors with similar technology;
- Some patent licenses held by us may be terminated upon the occurrence of specified events or become non-exclusive after a specified period;
- Companies that obtain patents claiming products or processes that are necessary for or useful to the development of our products could bring legal actions against us claiming infringement (though we currently are not the subject of any patent infringement claim);
- Issuance of a valid patent does not prevent other companies from using alternative, non-infringing technology, so we cannot be sure that any of our patents (or patents issued to others and licensed to us) will provide significant commercial protection;
- We may not have the financial resources necessary to obtain patent protection in some countries or to enforce any patent rights we may hold;
- The laws of some foreign countries may not protect proprietary rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting their proprietary rights in these foreign countries;
- We may be required to obtain licenses from others to develop, manufacture or market our products. We may not be able to obtain these licenses on commercially reasonable terms, and we cannot be sure that the patents underlying the licenses will be valid and enforceable; and
- We also rely upon unpatented, proprietary technology, which we may not be able to protect fully if others independently develop substantially equivalent proprietary information or techniques, improperly gain access to our proprietary technology or disclose this technology to others.

We attempt to protect our proprietary materials and processes by relying on trade secret laws and non-disclosure and confidentiality agreements with our employees and other persons with access to our proprietary materials or processes or who have licensing or research arrangements with us. We plan to continue to use these protections in the future, but we cannot be sure that these agreements will not be breached or that we would have adequate remedies for any breach. Even with these protections, others may independently develop or obtain access to these materials or processes, which may materially adversely affect our competitive position.

If we are sued for infringing the patent or other proprietary rights of a third party, we could incur substantial costs and diversion of management and technical personnel, whether or not the litigation is ultimately determined in our favor.

For a description of the patent litigations in which we have been involved, see Item 3, "Legal Proceedings."

***WE DO NOT MANUFACTURE MOST OF OUR DEVICES OR ANY OF OUR VACCINE PRODUCTS AND ARE DEPENDENT ON ONE CONTRACT MANUFACTURER FOR INVOJECT® AND EGG REMOVER® DEVICES AND ANOTHER CONTRACT MANUFACTURER FOR AAC PRODUCTION. WE ARE ALSO DEPENDENT ON SINGLE CONTRACT MANUFACTURERS FOR PRODUCTION OF BOTH BURSAPLEX® AND NEWPLEX™***

#### **General Risks Associated with Reliance on Contract Manufacturers**

We currently do not have facilities for the production of most of our devices and vaccine products. Therefore, we rely principally upon relationships with contract manufacturers. There can be no assurance that we can maintain manufacture and supply agreements on terms and at costs acceptable to us. We have various relationships with manufacturers and suppliers, including those described below. The loss of any of these relationships could materially adversely affect our operating results. There are a number of risks associated with our dependence on contract manufacturers, including:

- reduced control over delivery schedules;
- potential inability to monitor and maintain inventory levels;
- reduced control over quality assurance;
- reduced control over manufacturing yields and costs;
- potential lack of adequate capacity during periods of unanticipated demand;
- limited warranties on products supplied to us;
- increases in prices at a higher rate than our ability to recover our increased costs through contractual price adjustments with our customers;
- reduced control over regulatory efforts;
- potential misappropriation of our intellectual property;
- catastrophic loss of production capacity due to property damage, either man made or by nature;
- the loss of these contract manufacturers due to financial circumstances in their respective businesses or their exit from the business lines that manufacture our devices and products; and
- minimum purchase requirements, which could result in excessive inventories if the demand for products falls short of such minimum purchase requirements.

If our contract manufacturers failed to provide us with an adequate supply of finished devices or vaccine products, our business would be harmed. We do not have long-term contracts or arrangements with several of our vendors that guarantee product availability or the continuation of particular payment terms. In addition, we are currently dependent on a single contract manufacturer for several of our key products as described below. Although we believe our relationship with each of the manufacturers is sound, we cannot assure you that we will continue to maintain relationships with them or that they will continue to exist.

## **Inovobject® and Egg Remover® Systems**

We rely on Precision to fabricate all of our Inovobject® and Egg Remover® systems. While other machine fabricators exist and have constructed limited numbers of Inovobject® systems, we do not currently have alternative sources for production of either the Inovobject® or Egg Remover® systems. If Precision is unable to carry out its manufacturing obligations to our satisfaction, we may be unable to obtain alternative manufacturing, or to obtain such manufacturing on commercially reasonable terms or on a timely basis. Any delays in the manufacturing process may adversely impact our ability to meet commercial demands for Inovobject® and Egg Remover® system installations and delay receipt of revenues from those installations.

## **Vaccines and AAC Technology**

We obtain all of our requirements for the active ingredient in AAC technology from Charles River Laboratories, Inc. through SPAFAS. Under our agreement with SPAFAS, we are required to purchase minimum amounts of AAC-based antigen on an annual basis. The manufacture of AAC must be performed in licensed facilities and is subject to USDA regulation. The regulatory approvals granted by the USDA for Bursaplex® in January 1997 and for Newplex™ in May 2003 specifically cover vaccines produced with SPAFAS-manufactured AAC. Although there are other manufacturers that may be capable of manufacturing AAC, we do not currently have alternative sources for production of AAC.

Currently our supplier for Bursaplex® is Select and our supplier of Newplex™ is LAHI. The manufacture of all vaccine products must be performed in licensed facilities, under approved regulatory methods. As the USDA licensed manufacturers of record, Select holds the USDA permit for Bursaplex® and LAHI holds the USDA permit for Newplex™. Although there are other manufacturers that should be capable of manufacturing avian viral vaccines, we do not currently have alternative sources for production of either product.

If SPAFAS, Select or LAHI is unable to carry out its respective manufacturing obligations (described above) to our satisfaction, we may be unable to obtain alternative manufacturing, or to obtain such manufacturing on commercially reasonable terms or on a timely basis. A change of any of our suppliers could materially adversely affect our future operating results due to the time it would take a new supplier to obtain regulatory approval by the USDA of its production process or manufacturing facilities. Current regulatory approvals in foreign countries are or will be based on product manufactured with AAC as manufactured by SPAFAS, Bursaplex® as manufactured by Select or Newplex™ as manufactured by LAHI. A change of manufacturer would result in the need to reapply for regulatory approval in those countries and may lead to suspended sales of that product until new approvals could be secured. Any delays in securing new approvals would have a material adverse effect on our revenues and growth prospects. We cannot guarantee that we would be able to secure new approvals in every country or that such approvals would be granted in a timely fashion.

## ***WE FACE RISKS RELATED TO COMPLIANCE WITH LAWS IMPACTING CORPORATE GOVERNANCE AND FINANCIAL REPORTING STANDARDS***

Changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley"), new Public Company Accounting Oversight Board standards and rules, new SEC regulations, and new Nasdaq National Market rules, are creating uncertainty and expense for companies such as ours. These new or changed laws, regulations and standards are complex and extensive, and as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies, which could result in evolving disclosure and corporate governance practices. As a result, our efforts to comply with evolving laws, regulations and standards have resulted in, and are likely to continue to result in, increased general and administrative expenses and management time related to compliance activities. In particular, our efforts to comply with Section 404 of Sarbanes-Oxley and the related regulations regarding our assessment of our internal controls over financial reporting and our external auditors' audit of that assessment has required the commitment of significant financial and managerial resources. We expect these efforts to require the continued commitment of significant resources including additional outside legal, accounting and advisory services. In addition, as our international operations continue to grow and foreign operations become financially significant, it will be necessary for those foreign subsidiaries to meet requirements for internal control over financial reporting pursuant to Section 404 of Sarbanes-Oxley. Due to the limited staffing at some of our foreign subsidiaries, there is no assurance that we would be able to meet requirements for internal control over financial reporting, particularly requirements for segregation of duties. If we fail to comply with new or changed laws, regulations and standards, our reputation may be harmed and we might be subject to sanctions or investigation by regulatory authorities, such as the SEC. Any such action could adversely affect our financial results and the market price of our Common Stock.

***WE FACE THE RISK THAT WE MAY NEED TO MAKE ADDITIONAL CONTRIBUTIONS TO OUR 401(K) PLAN***

Historically, under our 401(k) Plan, we have based participant and employer contributions on participants' salaries. In the third quarter of 2005, we discovered that the 401(k) Plan documents prepared by our third party administrator provide (and we believe incorrectly) that other elements of compensation be included when determining the appropriate contributions. Our intent has always been that contributions be based only on base salary. We intend to seek approval to conform the 401(k) Plan document retroactively to our intent and practice. Should this relief not be granted, we believe we would be required to make additional contributions to the 401(k) Plan for participants who had not already reached the maximum contribution. We are unable to estimate at this time the amount of additional contributions that potentially could be required and for what time periods. We are not able to predict whether any additional contributions would have a material and adverse effect on our historical or future financial statements.

***POULTRY HEALTH AND DISEASE FACTORS AFFECTING OUR CUSTOMERS MAY ADVERSELY AFFECT OUR FINANCIAL RESULTS***

Any widespread poultry health problem or disease outbreak, such as avian influenza in poultry, could have a negative impact on global poultry production. Our revenues and earnings derived from both the U.S. and international poultry industry could be materially and adversely affected. In addition, the emergence of new disease variants, serotypes and strains in the domestic and/or global markets may reduce the efficacy of our vaccine products and result in reduced revenues and earnings.

***WE ARE DEPENDENT ON DISTRIBUTORS IN CERTAIN MARKETS***

We market and distribute our devices principally by leasing and licensing the systems directly to hatcheries. In some markets, such as Japan, we instead rely upon distributors for our devices. We also rely on third parties to market certain of our vaccine products, such as products containing AAC technology, and we may enter into other arrangements in the future. There can be no assurance that we can maintain these relationships on terms acceptable to us. The loss of any of these relationships could materially adversely affect our operating results. There are a number of risks associated with our dependence on distributors and other third parties including:

- reduced control over regulatory efforts, which may delay local regulatory approvals and thus market introduction;
- reduced control over marketing and sales efforts and in turn the extent of resulting market penetration or acceptance;
- reduced control over distribution and related customer satisfaction; and
- potential delays in distribution associated with securing new distributors, including the possible need to seek re-registration in markets where a distributor may hold product registration, if current relationships are not maintained.

***THE LOSS OF KEY COLLABORATORS, SUPPLIERS AND OTHER KEY PARTIES COULD ADVERSELY AFFECT OUR FINANCIAL RESULTS***

We currently conduct our operations with various third-party collaborators, suppliers, licensors or licensees. We plan to continue developing these relationships and believe our present and future collaborators, suppliers, licensors and licensees will perform their obligations under their agreements with us, based on an economic motivation to succeed. However, financial or other difficulties facing these parties may affect the amount and timing of funds and other resources devoted by the parties under these agreements. In addition, disagreements may arise with these third parties which could delay or lead to the termination of the development or commercialization of new products, or result in litigation or arbitration, which would be time-consuming and expensive. Thus, there is no assurance that we will develop any new products or generate any revenues from these collaborative agreements.

***WE ARE SUBJECT TO AN INHERENT RISK OF PRODUCT LIABILITY***

The development, manufacture, distribution and marketing of our products involve an inherent risk of product liability claims and associated adverse publicity. These claims may be made even with respect to those products that are manufactured in licensed and approved facilities or that otherwise possess regulatory approval for commercial sale. These claims could expose us to significant liabilities that could prevent or interfere with the development and marketing of our products. Product liability claims could require us to spend significant time and money in litigation or pay significant damages. Although we currently maintain liability insurance that we believe is adequate



to cover our potential exposure in this area, there can be no assurance that the coverage limits of our policies will be adequate. Such insurance is expensive, difficult to obtain and may not continue to be available on acceptable terms or at all.

#### ***GOVERNMENT REGULATION AND THE NEED FOR REGULATORY APPROVAL MAY ADVERSELY AFFECT OUR BUSINESS***

Regulatory approval required in various areas of our business may materially adversely affect our operations. The primary emphasis of these requirements is to assure the safety and effectiveness of our products. While the use of the Inovoject® system is not subject to regulatory approval in the United States, it may require regulatory approval by foreign agencies. Also, research and development activities and the investigation, manufacture and sale of poultry health products are subject to regulatory approval in the United States by either the USDA or the FDA and state agencies, as well as by foreign agencies. Obtaining regulatory approval is a lengthy, costly and uncertain process. Approval by the USDA generally takes one to three years, while approval by the FDA may take five or more years. In December 2005, the Company submitted its application to the USDA for approval of the Inovocox™ vaccine. We currently have no products under development that would require approval by the FDA. Various problems may arise during the regulatory approval process and may have an adverse impact on our operations. Changes in the policies of U.S. and foreign regulatory bodies could increase the time required to obtain regulatory approval for each new product. Delays in obtaining approval may materially adversely affect the marketing of, and the ability to receive revenues and royalties from, products developed by us. There is no assurance that any future products developed by us or by our collaborative partners will receive regulatory approval without lengthy delays, if at all. Even when approved, regulators may impose limitations on the uses for which the product may be marketed and may continue to review a product after approving it for marketing. Regulators may impose restrictions and sanctions, including banning the continued sale of the product, if they discover problems with the product or its manufacturer.

Pursuant to some of our licensing or joint development agreements, the licensees or joint developers bear the costs associated with the regulatory approval process for some products. We plan to continue to enter into these types of agreements in the future. If we cannot generate sufficient funds from operations or enter into licensing or joint development agreements to develop products, we may not have the financial resources to complete the regulatory approval process with respect to all or any of the products currently under development.

Other regulations apply or may apply to research and manufacturing activities, including federal, state and local laws, regulations and recommendations relating to the following:

- safe working conditions;
- laboratory and manufacturing practices; and
- use and disposal of hazardous substances used in conjunction with research activities.

It is difficult to predict the extent to which these or other government regulations may adversely impact the production and marketing of our products.

#### ***OUR INABILITY TO ATTRACT AND RETAIN KEY PERSONNEL COULD ADVERSELY AFFECT OUR BUSINESS***

We must continue to attract and retain experienced and highly educated scientific and management personnel and advisors to be able to develop marketable products and maintain a competitive research and technological position. Competition for qualified employees among biotechnology companies is intense. There can be no assurance that we will be able to continue to attract and retain qualified staff. The departure of any key executive or our inability to recruit and retain key scientific or management personnel could have an adverse effect on our business, results of operations or financial condition. Our ability to replace key individuals may be difficult and may take an extended period of time because of the limited number of individuals in the biotechnology industry with the breadth of skills and experience required to develop and commercialize products successfully. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate such individuals.

#### ***IF WE CANNOT CONTINUE TO PROVIDE TIMELY SUPPORT AND MAINTENANCE TO OUR CUSTOMERS, OUR BUSINESS MAY SUFFER***

We are required to supply, support and maintain large numbers of Inovoject® systems at our customers' hatcheries on a timely basis at a reasonable cost to us. There can be no assurance that we will be able to continue to provide

these services on a timely or cost-effective basis. If we are unable to do so, our customers may reduce their use of our products, which could materially adversely affect our operating results.

### **WE HAVE ANTI-TAKEOVER DEFENSES THAT COULD DISCOURAGE OR DELAY A TAKEOVER**

Provisions of our certificate of incorporation and bylaws could have the effect of discouraging or delaying an acquisition of our company. For example, the Board of Directors has the authority to issue up to 15,000,000 shares of Preferred Stock in one or more series and to determine the designations, preferences and relative rights and qualifications, limitations or restrictions of the shares constituting any series of Preferred Stock. The issuance of Preferred Stock by the Board of Directors could affect the rights of the holders of Common Stock. For example, an issuance could result in a class of securities outstanding that would have preferences with respect to voting rights and dividends and in liquidation over the Common Stock and could (upon conversion or otherwise) enjoy all of the rights applicable to Common Stock. The authority of the Board of Directors to issue Preferred Stock potentially could be used to discourage attempts by others to obtain control of us through merger, tender offer, proxy contest or otherwise by making these attempts more difficult to achieve or more costly. The Board of Directors may issue the Preferred Stock without shareholder approval and such Preferred Stock could have voting and conversion rights that could materially adversely affect the voting power of the holders of Common Stock. No agreements or understandings currently exist for the issuance of Preferred Stock, and the Board of Directors has no present intention to issue any Preferred Stock. The Board adopted a shareholder rights plan that could have the effect of discouraging a takeover of us. The rights plan, if triggered, would make it more difficult to acquire us by, among other things, allowing existing shareholders to acquire additional shares of Common Stock at a substantial discount, thus substantially inhibiting the ability of an interested party to obtain control of our company.

### **ITEM 1B. UNRESOLVED STAFF COMMENTS**

Not applicable.

### **ITEM 2. PROPERTIES**

Embrex leases its corporate headquarters, which occupies approximately 60,000 square feet and is located adjacent to Research Triangle Park, North Carolina. About one-third of the space is devoted to research and development. The lease had an initial six-year term expiring in 2005 and an additional six-year optional renewal term with annual rent increases of approximately 5%. In October 2005, the Company exercised its option to extend the lease for the first two years of the six-year optional renewal term. Embrex paid an annual rent of approximately \$0.6 million during 2005. In addition to research and development activities conducted at its corporate headquarters, Embrex leases a 12,800 square-foot research facility near its headquarters. The lease has a 10-year term expiring in 2007, with a five-year renewal option. The annual rent paid in 2005 was approximately \$0.2 million, with annual increases of approximately 3% through the first 10 years and approximately 4% during the five-year renewal term.

Embrex purchased approximately 60 acres in Scotland County, North Carolina in December 2002 for the purpose of constructing and equipping the Embrex Poultry Health vaccine manufacturing and testing facility. In January 2003, construction was initiated for this 40,000 square foot facility. Construction of the facility was substantially completed in March 2004 with a cost to date of approximately \$14.7 million.

In addition to the Company's principal facilities located in North Carolina, Embrex purchased an office building in Brazil in September 2005 at a cost of \$0.3 million inclusive of the land the building is located on. Embrex also has leased office and warehouse space at other U.S. and international locations.

### **ITEM 3. LEGAL PROCEEDINGS**

In December 2003, Embrex filed suit in the U.S. District Court for the Eastern District of North Carolina against Breuil S.A. of Landivisiau, France, and New Tech Solutions, Inc. of Gainesville, Georgia, asserting patent infringement. Embrex alleges that each of the defendants' development of candling and *in ovo* selective injection devices, designed to compete with Embrex's patented Inovoject® system injection with Vaccine Saver® option and Egg Remover® system, infringes two Embrex patents related to Embrex's proprietary apparatus and methods for distinguishing live eggs from infertile or "dead" eggs and for selectively injecting specific eggs identified as suitable for inoculation as well as the apparatus performing this function. Embrex seeks injunctive relief and monetary damages and has asked for a jury trial. The defendants have denied infringement and alleged that Embrex's two patents are invalid. Fact discovery is nearly completed. The court conducted a Markman hearing to determine the meaning and scope of the patent claims. The court issued a Markman opinion adopting Embrex's claim construction. Embrex filed a motion for summary judgment of infringement, and a motion for summary judgment of patent validity. Briefing on the motions is nearly complete. After briefing, the court will issue an opinion. Because of this

lawsuit, the Company's results of operations have been impacted and will continue to be impacted by the costs of pursuing this litigation. Moreover, there can be no assurance the Company will prevail in its claims against Breuil S.A. or New Tech Solutions, Inc. Even if the court finds in Embrex's favor, the Company has no assurances that any damage award will exceed the Company's costs of pursuing this litigation or that the Company would be able to collect any damages from either defendant.

In August 2004, Embrex filed suit in the U.S. District Court for the Middle District of North Carolina against AviTech, LLC ("AviTech") of Hebron, Maryland asserting patent infringement. Embrex alleges that AviTech's injection system, designed to compete with the Company's patented Inovoject® system, infringes one of the Company's patents related to the Company's proprietary apparatus and methods for accurately and precisely injecting eggs to the same depth and location when the eggs are of varying sizes and may be presented to the injection apparatus in somewhat different orientations. The Company seeks injunctive relief and monetary damages and has asked for a jury trial. The defendant denied that the North Carolina court has jurisdiction and moved to dismiss or, in the alternative, for transfer to the United States District Court in Maryland. The Company opposed the defendant's motion. The court heard oral argument on the motion, granted the defendant's motion in part and transferred the case to the U.S. District Court for the District of Maryland, Northern Division, where AviTech filed a complaint against Embrex for a declaratory judgment of alleged patent invalidity, patent noninfringement, patent unenforceability and monetary damages based on an alleged antitrust claim. Embrex filed a motion to dismiss AviTech's declaratory judgment claims. The motion is fully briefed, and the court's decision is pending. Fact discovery recently commenced. Because of this lawsuit, the Company's results of operations have been impacted and will continue to be affected by the costs of pursuing this litigation. Moreover, there can be no assurance the Company will prevail in its claims against AviTech or that the Company will be able to successfully defend against AviTech's claims. Even if the court finds in the Company's favor, the Company has no assurances that any damage award will exceed the Company's costs of pursuing this litigation or that the Company would be able to collect any damages from the defendant.

The Company filed a lawsuit in April 2002 against Fort Dodge Australia, Pty. Ltd. and Wyeth, alleging breach of contractual obligations to develop, register and market Bursamune®, an IBD vaccine based upon the Company's AAC technology, in the territories of Europe, the Middle East and Africa, unfair and deceptive trade practices and related claims. In July 2002, Wyeth asserted a counterclaim against Embrex alleging breach of contract and related claims. On June 30, 2003, Embrex announced that it had reached settlement in this litigation with Wyeth. Under the terms of the settlement, Embrex and Fort Dodge dismissed all claims pending between them in return for payment to Embrex by Fort Dodge of \$5.0 million. This settlement resulted in net other income of \$3.7 million after legal expenses related to the settlement.

#### **ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS**

No matters were submitted to a vote of security holders during the fourth quarter of the fiscal year ended December 31, 2005.

### **PART II**

#### **ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES**

*Common Stock Market Information.* The Company's Common Stock trades on the Nasdaq National Market under the symbol EMBX. The quarterly trading ranges of the sales prices of the Company's Common Stock (based on each day's closing prices during the specified quarter) for the last two fiscal years were as shown in the table below:

<u>Quarter Ended</u>	<u>Common Stock</u> <u>Price Per Share</u>	
	<u>High</u>	<u>Low</u>
March 31, 2004	\$ 14.99	\$ 10.06
June 30, 2004	\$ 13.54	\$ 11.10
September 30, 2004	\$ 14.50	\$ 12.60
December 31, 2004	\$ 13.70	\$ 13.00
March 31, 2005	\$ 13.31	\$ 10.90
June 30, 2005	\$ 12.00	\$ 11.10
September 30, 2005	\$ 13.86	\$ 11.13
December 31, 2005	\$ 14.69	\$ 11.20

*Holders and Dividends.* At February 17, 2006, there were 360 holders of record of the Common Stock. This number does not include beneficial owners of the Company's Common Stock whose stock is held in nominee or "street" name accounts through brokers. The Company has paid no dividends on any stock since inception and has no plans to pay dividends on its Common Stock in the foreseeable future. Additionally, pursuant to the Company's line of credit with its bank, without the prior written consent of the bank, the Company may not declare or pay any dividends until payment in full of any indebtedness and performance of all obligations under the related loan documents.

*Sales of Unregistered Securities.* There were no sales of unregistered securities during the fourth quarter of fiscal 2005.

*Issuer Purchases of Equity Securities.* The Company did not purchase any shares of its Common Stock during the fourth quarter of fiscal 2005.

## **ITEM 6. SELECTED FINANCIAL DATA**

### **5-YEAR SUMMARY OF SELECTED FINANCIAL DATA**

(In thousands, except per share amounts)		<u>2005</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2001</u>
<b>CONSOLIDATED STATEMENTS OF OPERATIONS DATA</b>						
Revenues		\$ 52,592	\$48,717	\$46,025	\$45,325	\$44,660
Research and development expenses		10,692	10,474	12,540	10,162	8,120
Other operating expenses		15,996	13,922	9,951	9,107	9,681
Net income		2,947	3,313	7,611	7,171	7,967
Net income per share of Common Stock						
	Basic	\$ 0.37	\$0.42	\$0.94	\$0.88	\$1.00
	Diluted	\$ 0.35	\$0.40	\$0.91	\$0.82	\$0.92
Number of shares used in per share calculation						
	Basic	8,007	7,954	8,119	8,116	8,007
	Diluted	8,353	8,343	8,369	8,692	8,644

### **CONSOLIDATED BALANCE SHEET DATA**

Working capital	\$ 10,446	\$12,467	\$15,746	\$14,005	\$9,670
Total assets	67,474	62,580	59,717	42,013	34,058
Long-term liabilities	8,144	8,518	6,404	46	43
Retained earnings (accumulated deficit)	5,312	2,365	(948)	(8,559)	(15,730)
Shareholders' equity	52,447	47,022	45,692	37,164	29,314

## **ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

The following discussion and analysis should be read in conjunction with the Company's consolidated financial statements and related notes appearing elsewhere in this report.

Embrex is an international biotechnology company engaged in the development of innovative *in ovo* solutions that meet the needs of the global poultry industry. The Company derives most of its global revenues from lease fees for the number of eggs processed by the Inovoject® system. Other revenue sources for the Company come from lease fees related to the Egg Remover® system and Vaccine Saver® option. In addition to these sources, the Company may sell each of these devices to distributors under special circumstances in selected countries and to human flu vaccine manufacturers. Revenues from all of these sources are categorized as device revenues in the Company's financial statements. Another source of revenues for the Company is product sales, which currently consist of sales of the Company's *in ovo* vaccine, Bursaplex®. The Company also derives some revenues from contract research and development ("R&D"), grant sources and other minor products. The Company's cost of revenue is primarily attributable to the costs of supporting the Company's devices at customer locations around the world. These costs include the labor, travel and parts necessary to ensure proper operation and maintenance of Embrex's devices located at hatcheries of the Company's customers, as well as associated depreciation, sales and property tax expenses.

During 2005 the Company experienced consolidated revenue growth of 8% primarily due to an increase in device revenues. Approximately 66% of the device revenue increase occurred outside of the United States primarily driven by new Inovoject® system customers in Latin America. However, the Company's gross margin of 58% was one percentage point lower than 2004 as a result of an 11% increase in cost of revenues. Operating profit decreased 14% due primarily to increased Inovocox™ production facility expenses, growth in expenses related to expansion in Brazil, additional Sarbanes-Oxley compliance-related expenses, and other increases described below. In addition, total other income was \$0.1 million higher in 2005 than 2004 due to higher interest rates on cash held in non-U.S. regions. Income taxes were 10% lower in 2005 than 2004 with the effective tax rate unchanged at 26%. Overall net income decreased 11%, or \$0.4 million, from 2004 to 2005.

## RESULTS OF OPERATIONS

### Net Income

(In thousands, except per share amounts)

	2005 vs. 2004				2004 vs. 2003			
	2005	2004	Change (\$)	Change (%)	2004	2003	Change (\$)	Change (%)
Consolidated Revenue	\$52,592	\$48,717	\$3,875	8%	\$48,717	\$46,025	\$2,692	6%
Operating Income	3,570	4,174	(\$604)	(14%)	4,174	4,620	(446)	(10%)
Net Income	\$2,947	\$3,313	(\$366)	(11%)	\$3,313	\$7,611	(\$4,298)	(56%)
Earnings per share – basic	\$0.37	\$0.42	(\$0.05)	(12%)	\$0.42	\$0.94	(\$0.52)	(55%)
Earnings per share – diluted	\$0.35	\$0.40	(\$0.05)	(11%)	\$0.40	\$0.91	(\$0.51)	(56%)

Consolidated net income for 2005 decreased to \$2.9 million, 11% lower than 2004 net income of \$3.3 million, which was 56% lower than 2003 net income of \$7.6 million. Diluted earnings per share were \$0.91 in 2003, \$0.40 in 2004 and \$0.35 in 2005. The decrease in net income from 2004 to 2005 is mainly attributed to the start-up of Embrex Poultry Health, preparation of Inovocox™ pre-launch activities and expensing of restricted stock grants. The decrease in 2004 net income compared to 2003 was primarily due to the \$3.7 million settlement of the Company's litigation with Fort Dodge in 2003 (net of legal fees) and \$0.9 million spent on accounting fees for Sarbanes-Oxley compliance in 2004, which is a \$0.7 million increase over 2003.

### Outstanding Shares

(In thousands)

	2005	2004	2003
Weighted Average Shares Outstanding	8,007	7,954	8,119
Diluted Average Shares Outstanding	8,353	8,343	8,369

The weighted average shares outstanding increased by 53 thousand shares from 2004 to 2005, or less than 1%, and decreased by 165 thousand shares from 2003 to 2004, or 2%. The increase in shares from 2004 to 2005 is mainly due to stock option exercises and the restricted stock grant awards under the Company's stock compensation plans. The decrease in outstanding shares from 2003 to 2004 is primarily due to the repurchase of shares in 2004 pursuant to the Company's share repurchase programs.

Diluted average shares outstanding increased 10 thousand shares, or less than 1% from 2004 to 2005. This increase is due to the exercise of stock options and restricted stock grant awards in 2005, which was partially offset by the decrease in the average closing share price of the Company's Common Stock from \$12.72 in 2004 to \$12.21 in 2005, which resulted in fewer in-the-money stock options being taken into account in computing diluted average shares outstanding. The diluted average shares outstanding decreased by 26 thousand shares from 2003 to 2004, or less than 1%, which was due to common stock repurchases by the Company during 2004. Partially offsetting this was the increase in the average closing share price of the Company's common stock from \$9.82 per share in 2003 to \$12.72 per share in 2004. The rise in stock price increased the number of outstanding stock options with exercise prices that were less than the market price of Embrex's stock (i.e., "in-the-money" stock options). Because only in-the-money stock options are counted in computing diluted average shares outstanding, the higher average closing price for the Company's common stock in 2004 as compared to 2003 resulted in more stock options being taken into account in 2004.

## Revenues

(In thousands)

	<u>2005 vs. 2004</u>				<u>2004 vs. 2003</u>			
	<u>2005</u>	<u>2004</u>	<u>Change</u> <u>(\$)</u>	<u>Change</u> <u>(%)</u>	<u>2004</u>	<u>2003</u>	<u>Change</u> <u>(\$)</u>	<u>Change</u> <u>(%)</u>
Device revenues	\$48,741	\$46,157	\$2,584	6%	\$46,157	\$43,458	\$2,699	6%
Product sales	3,167	2,037	1,130	55%	2,037	1,970	67	3%
Other revenues	684	523	161	31%	523	597	(74)	(12%)
Consolidated revenues	\$52,592	\$48,717	\$3,875	8%	\$48,717	\$46,025	\$2,692	6%

Consolidated revenues in 2005 totaled \$52.6 million, representing an increase of 8% over 2004 revenues of \$48.7 million, which was 6% over 2003 revenues of \$46.0 million. Device revenues totaled \$48.7 million in 2005, compared to \$46.2 million in 2004 and \$43.5 million in 2003, representing increases of 6% from 2004 to 2005, and 6% from 2003 to 2004. The 2005 revenue increase derives mainly from increased device fees, which is primarily due to an increase in the Inovoject® system customer base, as well as new Egg Remover® installations. Product sales increased 55% from \$2.0 million in 2004 to \$3.2 million in 2005 as Bursaplex® sales followed increased production in Asian markets as avian flu effects receded, and increased 3% from 2003 to 2004. Other revenues increased 31% from \$0.5 million in 2004 to \$0.7 million in 2005 and decreased 12% from \$0.6 million in 2003 to \$0.5 in 2004. The majority of other revenues between 2003 and 2005 consist of funding from contract research and development, grant sources and other minor products. The increase in 2005 of other revenues and the decrease in 2004 other revenues were caused mainly by variability in grant income from year to year.

During 2005, the U.S. Dollar weakened against select currencies compared to the same period during 2004. If average exchange rates during 2005 had remained the same as the average exchange rates for these currencies during 2004, the Company's revenues would have been approximately \$0.8 million lower and the overall increase would have been \$3.1 million rather than the actual increase of \$3.9 million.

The 2005 revenues include device lease fees for use of Inovoject® and Egg Remover® systems and Vaccine Saver® option by poultry producers in the United States and foreign countries, and the sale of devices to distributors and human flu vaccine manufacturers. The sporadic nature of device sales to distributors and human flu vaccine companies may cause variability in revenue and gross profit on an annual and quarterly basis. Embrex estimates that as of December 31, 2005, it was vaccinating in excess of 85% of the estimated nine billion broiler birds grown in the United States and Canada in 2005. Given its market penetration, the Company expects only limited Inovoject® system revenue and earnings growth in this market, most of which is anticipated to come from new Egg Remover® installations. In addition, the introduction of competitor machines could affect growth and/or the maintenance of the Company's revenues.

Sales of Bursaplex®, the Company's proprietary vaccine for the treatment of avian infectious bursal disease, was the source of approximately \$3.2 million of product sales in 2005, and \$2.0 million in each of 2004 and 2003. Bursaplex® sales growth from 2003 to 2004 was restrained mainly by continued challenges in Asia resulting from avian influenza outbreaks and poor economic conditions. As the effects of avian influenza subsided during 2005, production and consumption levels of poultry increased, as well as exported poultry from the Asian region, leading to a 55% increase in Bursaplex® sales from 2004 to 2005.

Management anticipates limited revenue and earnings growth in 2006 from existing Inovoject® system operations in the United States and Canada, higher revenue growth from new Inovoject® system leases in other countries, and increased sales of Bursaplex® to poultry producers worldwide. However, the rate at which the marketplace will

accept the Inovoject® system technology outside the United States and Canada, the degree of acceptance of our competitors' machines within the United States and elsewhere, the timing of regulatory approvals of third-party vaccines for *in ovo* use outside the United States and Canada, costs associated with market expansion, possible variability in United States hatchery bird production as a result of grain price fluctuations, and variability in the demand for, and pricing of, U.S. poultry and poultry products both inside and outside the United States will impact the pace of revenue growth, if any, and sustained profitability from the installation and operational throughputs of Inovoject® systems. In addition, avian disease outbreaks in markets where Embrex has device placements and sales also may affect future revenues. Demand for vaccine products is affected by local poultry producers' perceived degree of viral challenge. This may impact future revenues as well.

### Cost of Revenues

(In thousands)	2005 vs. 2004				2004 vs. 2003			
	2005	2004	Change \$	Change %	2004	2003	Change \$	Change %
Consolidated Revenues	\$52,592	\$48,717	\$3,875	8%	\$48,717	\$46,025	\$2,692	6%
Cost of Device Revenues & Product Sales	22,334	20,147	2,187	11%	20,147	18,914	1,233	7%
Gross Profit	\$30,258	\$28,570	\$1,688	6%	\$28,570	\$27,111	\$1,459	5%
Gross Margin	58%	59%			59%	59%		

Cost of revenues was 42% of total revenues in 2005 as compared to 41% of total revenues for both 2004 and 2003. Consequently, gross margin was 58% for 2005, and 59% for both 2004 and 2003. Gross margin is affected by material costs related to servicing the Company's devices and changes in the Company's product mix, described in "Revenues" above. The decrease in gross margin between 2004 and 2005 was primarily due to the regional and revenue mix, which includes higher product sales, additional recurring device lease fees, particularly in Latin America, as well as lower device sales. Since device sales have a higher gross margin than the Company's other revenue sources, the lower device sales in 2005 contributed to the reduction in gross margin. In addition, gross margin associated with operations outside the United States and Canada, particularly for device leases, has historically been lower than for operations inside the United States and Canada.

In addition, inflationary pressure associated with the increase in the cost of stainless steel resulted in an increase in the material costs used for maintaining the Company's devices and depreciation expenses in both 2004 and 2005 due to increased capital cost for new devices. These increases, as well as increased depreciation expenses the Company incurs as fully depreciated devices are replaced with new devices, could continue to cause gross margin to decrease in the future. Also, downward pressure on device lease fees, upward changes in other input costs and regional and product mix could cause gross margin to decrease in the future.

### Operating Expenses

(In thousands)	2005 vs. 2004				2004 vs. 2003			
	2005	2004	Change (\$)	Change (%)	2004	2003	Change (\$)	Change (%)
General & Administrative	\$11,487	\$10,983	\$504	5%	\$10,983	\$7,119	\$3,864	54%
Sales & Marketing	4,509	2,939	1,570	53%	2,939	2,832	107	4%
Research & Development	10,692	10,474	218	2%	10,474	12,540	(2,066)	(16%)
Total Operating Expenses	\$26,688	\$24,396	\$2,292	9%	\$24,396	\$22,491	\$1,905	8%

Operating expenses totaled \$26.7 million in 2005 compared to \$24.4 million and \$22.5 million in 2004 and 2003, respectively.

General and administrative ("G&A") expenses were \$11.5 million in 2005, up 5% from \$11.0 million in 2004, which was up 54% from \$7.1 million in 2003. The increase in G&A expenses from 2004 to 2005 was primarily due to additional staff-related expenses supporting business growth in Latin America, restricted stock grant expense, patent-related legal fees and increased accounting fees for internal controls in compliance with Sarbanes-Oxley. In addition, state franchise taxes, as well as property taxes related to the Embrex Poultry Health manufacturing facility, contributed to the increase in G&A expenses. The increase in G&A expenses from 2003 to 2004 was principally due to continued growth of expenses for the Company's Inovocox™ production facility, \$0.9 million of accounting and legal expenses related to accounting and internal controls to comply with Sarbanes-Oxley, increased insurance

premiums due to increased property and product liability exposures, patent-related legal fees and staff-related increases in support of the business.

Sales and marketing expenses totaled \$4.5 million in 2005, compared to \$2.9 million and \$2.8 million in 2004 and 2003. The primary reason for the overall increase was growth of the marketing group to assist with expansion in Latin American operations, pre-launch activities of Inovocox™ and the continued support of existing products. Additionally, sales and marketing expenses that were previously allocated to cost of revenues in 2004 have been retained in sales and marketing expenses in 2005 because certain sales and marketing expenses are now related to the support rather than the sale of the Company's products. The increase from 2003 to 2004 is principally due to additional personnel in the marketing group to support and market the Company's devices, as well as to prepare and support Inovocox™ after registration is achieved. Additional sales and marketing expenses may continue to be recorded under this classification rather than allocated to cost of revenues as infrastructure expands and matures.

R&D expenses were \$10.7 million in 2005 compared to \$10.5 million in 2004 and \$12.5 million in 2003. The increase from 2004 to 2005 is principally due to increased staff-related expenses related to start-up of Embrex Poultry Health in addition to Gender Sort development work. Most of the Gender Sort expenses occurred in the first half of the year before active work efforts on the project were suspended, which occurred at the beginning of the third quarter. Approximately \$0.5 million of Embrex Poultry Health expense representing manufacturing costs for Inovocox™ pre-licensing serials were capitalized throughout June 2005 as part of a construction-in-process asset and will be depreciated over the useful life of the facility. The decrease in R&D expense from 2003 to 2004 is primarily due to the write-off of the Gender Sort system purchased from AA, which increased 2003 R&D expenses by \$2.3 million. The Company continues to manage its R&D effort to leverage its know-how, patent position, market presence and expenditures. See "Products Under Development—Gender Sorting Device" under Item 1, "Business," above for further discussion of the write-off of the Gender Sort system purchased from AA.

The Company's overall R&D expenses reflect expenditures incurred in three distinct departments:

The first of these departments, R&D, is responsible for expenditures associated with the work on the Company's product portfolio, particularly Newplex™ vaccine and Inovocox™, the *in ovo* coccidiosis vaccine. Operating expenses for R&D in 2005 were \$5.2 million, compared to 2004 and 2003 expenses of \$5.0 million and \$5.5 million, respectively. The increase in expenses from 2004 to 2005 is primarily due to increased staff-related expenses as employees who were previously in Global Product Development & Supply ("GPDS") were transitioned to R&D as a result of the suspension of active work efforts on the Gender Sort project. The decrease in operating expenses from 2003 to 2004 is primarily due to reclassification of patent-related legal fees previously recorded as R&D expense that now are reflected as G&A expense, as well as the 2003 allocation of indirect expenses related to the Early Delivery Project from G&A to R&D that were not allocated in 2004 due to suspension of the ATP grant and this project in late 2003. Reorganization of R&D staff to GPDS and lower contract R&D expenses contribute to the decrease in 2004 R&D operating expenses as well.

The second of these R&D departments, GPDS, is responsible for development and testing of commercial machine devices and supply of biological products. During 2005 this group also was responsible for development and commercial testing related to the Gender Sort project and overseeing start-up of the Embrex Poultry Health manufacturing facility for the production of Inovocox™. GPDS operating expenses for 2005, 2004 and 2003 were \$2.6 million, \$3.0 million and \$5.4 million, respectively. The decrease in GPDS expenses from 2004 to 2005 is primarily due to the Company's decision to suspend active work efforts on the Gender Sort project. The decrease from 2003 to 2004 is primarily due to the purchase of the Gender Sort system from AA and the subsequent \$2.3 million write-down of the system as an R&D expense in 2003.

The third R&D department is Engineering and Manufacturing, which makes design modifications and improvements to the Inovoject® and Egg Remover® systems, as well as the Vaccine Saver® option. Beginning in 2004, start-up manufacturing costs associated with Embrex Poultry Health were captured in Engineering and Manufacturing expenses. Operating expenses for this department were \$2.9 million, \$2.5 million and \$1.6 million in 2005, 2004 and 2003, respectively. The increase in this group's expenses from 2004 to 2005 is primarily due to expenses related to the start-up of Embrex Poultry Health for the manufacturing of Inovocox™, as well as development work on the Gender Sort project, which since has been suspended as discussed above. The increase from 2003 to 2004 is due to staff-related and manufacturing expenses related to the start-up of Embrex Poultry Health in 2005. The group to which R&D expenses are classified may change as the purpose of the specific activity or activities change to meet the Company's strategic and operational objectives. In particular, a number of activities such as product portfolio work for Newplex™ and Inovocox™ may take the form of commercial support.



## Other Income and Expense

Interest income totaled \$0.2 million, \$0.1 million and \$0.2 million in 2005, 2004 and 2003, respectively. The increase in interest income from 2004 to 2005 is mainly due to higher interest rates on cash held in non-U.S. regions. The decreasing interest income from 2003 to 2004 is principally due to decreases in interest income received from a loan to AA that was repaid in 2003, in addition to lower available cash balances. See "Products Under Development—Gender Sorting Device" under Item 1, "Business," above, for further discussion of the Company's loan to AA.

Other Income totaled \$0.3 million in both 2005 and 2004, and approximately \$3.6 million in 2003. The other income in 2005 and 2004 is primarily related to foreign currency transaction gains and losses. The other income in 2003 is attributable to the settlement of the \$5.0 million Fort Dodge litigation in June 2003, which added \$3.7 million of income to the second quarter of 2003 after deducting legal costs. See Item 3, "Legal Proceedings," for further discussion of the Fort Dodge litigation.

Interest expense totaled less than \$0.1 million in 2005, 2004 and 2003. Interest costs of \$0.4 million, \$0.3 million and \$0.1 million related to the term loan for construction of the Embrex Poultry Health manufacturing facility are not reflected in the interest expense totals for 2005, 2004 and 2003, respectively. These amounts are being capitalized as part of the construction cost of the facility. Interest expense, depreciation and amortization of the facility will commence once the Embrex Poultry Health facility obtains USDA approval to manufacture Inovocox™. It is anticipated that interest related to the term loan will begin to be expensed during 2006 and is estimated to be approximately \$0.5 million in 2006.

Management expects to continue to rely principally on the use of internally generated funds, supplemented by a revolving line of credit, to finance the cost of additional devices in 2006, as was the case in 2005.

## Income Tax Expense

	<u>2005 vs. 2004</u>				<u>2004 vs. 2003</u>			
	<u>2005</u>	<u>2004</u>	<u>Change</u> \$	<u>Change</u> %	<u>2004</u>	<u>2003</u>	<u>Change</u> \$	<u>Change</u> %
Income before tax expense (benefit)	\$4,003	\$4,491	(\$488)	(11%)	\$4,491	\$8,384	(\$3,893)	(46%)
Income tax expense (benefit)	\$1,056	\$1,178	(\$122)	(10%)	1,178	773	405	52%
Net Income	\$2,947	\$3,313	(\$366)	(11%)	\$3,313	\$7,611	(\$4,298)	(56%)
Effective tax rate	26%	26%			26%	9%		

Income taxes totaled \$1.1 million for 2005, a \$0.1 million decrease from \$1.2 million in 2004, which was \$0.4 million higher than 2003 income tax expense of \$0.8 million. The effective tax rate for both 2004 and 2005 was 26% in comparison to 9% in 2003. In 2004, income tax expense and the effective tax rate increased over 2003 due to a \$0.2 million increase in the valuation allowance versus a \$1.7 million decrease in 2003, a lower R&D tax credit calculation in 2004 compared to 2003, an increase in 2004 business activities in foreign markets compared to 2003 and the use of net operating losses ("NOL's") in Embrex Europe Limited ("Embrex Europe") for the 2003 Fort Dodge settlement. These were partially offset by miscellaneous decreases including adjustments for amended income tax returns and the reevaluation of tax and inventory accruals. In 2003, the analysis of the Company's valuation allowance caused the lower income tax expense in comparison to 2004 and 2005. The evaluation indicated that the current and non-current deferred tax asset should be valued at \$2.6 million in 2003. As a result, net income increased \$2.3 million in 2003, which led to a lower full year tax rate and lower income tax expense in 2003. Income from the Fort Dodge settlement was offset by NOL's in Embrex Europe as a jurisdiction analysis indicated that the settlement should be recorded by the Company's European subsidiary. Therefore, no tax provision was recorded for the \$3.7 million settlement net of legal expenses in 2003.

## CRITICAL ACCOUNTING POLICIES

The Company's significant accounting policies are described in Note 1 to the consolidated financial statements in this Annual Report on Form 10-K, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these consolidated financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and

related disclosure of contingent assets and liabilities. On an on-going basis, the Company evaluates its estimates including but not limited to those related to:

- Allowance for uncollectible accounts
- Warranty accruals
- Inventory obsolescence
- Deferred tax assets
- Employee fringe benefit plan accrual

The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis of making judgments about carrying values of assets and liabilities that are not readily discernible from other sources. Actual results may differ from these estimates under different assumptions or conditions.

The Company believes the following critical accounting policies are material to the preparation of its consolidated financial statements.

#### Revenue Recognition

Revenues for devices subject to lease agreements are recognized based on eggs processed during the period in accordance with lease terms. Product sales are recognized upon delivery, as that is when title passes to the customer. Contract research revenue is recognized as services are performed or as milestones are met over the term of the contract. Grant revenue is recognized as expenses related to the specific grants are incurred. Revenue received, but not yet earned, is classified as deferred revenue. Revenue received from sales of devices to vaccine manufacturers is recognized when the device has been installed and has passed on-site testing. These sales frequently include a maintenance agreement for which the revenue is recognized over the period covered by the agreement.

The revenue section of the consolidated statements of operations divides revenues into three sections: device revenues, which include device lease fees and device sales; product sales, all or most of which is derived from sales of the Company's vaccine, Bursaplex®; and other revenues, which include income derived from contract research, grants from federal agencies and other miscellaneous sources.

#### Allowance for Uncollectible Accounts

To date, the Company has not experienced any material trade accounts receivable collection issues. However, based on a review of cumulative balances, industry experience and the current economic environment, the Company currently reserves from 2% to 4% of trade accounts receivable, depending on the credit terms in various markets, as an allowance for uncollectible accounts. In addition, adjustments due to the financial stability of individual customers will affect the overall percentage reserved. Once the Company determines an account is uncollectible it writes off the receivable balance against the reserve. Accounts are written off based on individual circumstances and only after all efforts of collection have been exhausted. The consolidated balance reserved for uncollectible accounts as of December 31, 2005 was \$0.3 million, which represents 4% of the trade accounts receivable balance at December 31, 2005.

#### Warranty Accruals

To date, the Company has not experienced any material device or product warranty issues in excess of amounts reserved. Based on the sale and lease of devices and sale of products, the Company has established a reserve for future claims. The reserve is based on the estimated damages that a customer would experience if an Inovoject® system or batch of Bursaplex® or Newplex™ should fail to perform to product specifications. The consolidated balance reserved for warranties as of December 31, 2005 was \$0.1 million.

#### Inventory Obsolescence

To date, the Company has not experienced any material inventory obsolescence. However, based on a percentage of the current product and device parts inventory levels, the Company has established a reserve against future device parts obsolescence due to technological improvements and limited shelf life of product inventories. The percentage used to calculate the reserve is based on a historical percentage rate adjusted for anticipated technological advances on devices and shelf life of existing vaccine product inventories. The consolidated balance reserved for product and parts obsolescence as of December 31, 2005 was \$0.3 million.

## Deferred Tax Assets

The Company records deferred tax assets based upon amounts that are likely to be realized. Based on the Company's recent profitability and belief that 2006 will result in an overall profit, the Company has recorded net current and long-term deferred tax assets of \$1.3 million. The Company's net deferred tax assets include a valuation allowance for two items that the Company may not be able to realize in future periods. The two items are research and development tax credits and deferred tax assets in foreign subsidiaries. This determination is based, in part, on historical operating performance as well as the likelihood of future income. The valuation allowance will be reduced when the Company believes that the likelihood of realizability of the related assets is more likely than not. In the event the Company was to determine that it would be able to realize its deferred tax assets in the future in excess of its net recorded amount, an adjustment to the valuation allowance would increase income in the period such determination was made. However, in the event the Company was to determine that it would not be able to realize its net recorded deferred tax asset in the future, an adjustment to the valuation allowance would decrease income in the period such determination was made.

## Employee Fringe Benefit Plan Accrual

The Company has established a reserve related to Embrex's employee fringe benefit plan. The most significant component of the accrual is the amount reserved for the employee self-insured health plan. The amount of the reserve is based on management's estimate of future employee health claims. The reserve covers expected short-term claims and is based on historical data adjusted for major events and anticipated changes in headcount or participation. The net balance reserved for the employee self-insured health plan as of December 31, 2005 and 2004 was \$0.2 million.

## EFFECT OF INFLATION

The Company expects cost of product sales and device revenues, operating expenses and capital equipment costs to change in line with periodic inflationary changes in price levels. While the Company generally believes that it will be able to offset the effect of price level changes by adjusting selling/lease prices and effecting operating efficiencies, any material unfavorable changes in price levels could have a material adverse effect on its results of operations.

## LIQUIDITY AND CAPITAL RESOURCES

At December 31, 2005, the Company's cash and cash equivalents balances totaled \$2.0 million compared to \$4.5 million and \$9.6 million at December 31, 2004 and 2003, respectively.

During 2005, approximately \$11 million of cash flow was generated by operating activities. Of this, nearly \$3 million was generated by net income, \$7.2 million in cash flows from operations was related to depreciation and amortization, including restricted stock amortization, and the balance was primarily a result of changes in working capital.

Cash from operations was invested in nearly \$15 million of capital expenditures, of which \$10 million or approximately 70% was used to acquire revenue generating devices, such as Inovoject<sup>®</sup> and Egg Remover<sup>®</sup> systems.

Approximately \$1.4 million was provided from the issuance of Common Stock related to the exercise of stock options and purchases under the Employee Stock Purchase Plan.

Repayments of long-term debt used to fund most of the Inovocox manufacturing facility consumed \$425 thousand.

Consequently, the Company consumed \$2.6 million of cash during 2005. Cash consumption during 2004 amounted to \$5.7 million, and was \$3.1 million higher than 2005 due primarily to \$3.5 million of share repurchases that did not occur in 2005.

The Company obtained a \$9.0 million construction/term loan from BB&T in August 2003 that was used for building and equipping the Embrex Poultry Health coccidiosis vaccine manufacturing facility located in Scotland County, North Carolina. At December 31, 2005, \$8.6 million of the construction/term loan was outstanding.

The Company has a \$6.0 million secured revolving line of credit with BB&T, which may be used for working capital purposes. The term of this line of credit has been extended to May 2006, and the Company anticipates

BB&T will renew this credit facility for a renewal term beyond May 2006. The line of credit carries an interest rate of the current LIBOR rate plus 1.60%. At December 31, 2005, the Company had no outstanding borrowings under this credit facility.

In August 2002, the Company announced that the Board of Directors authorized a share repurchase program (the "2002 Repurchase Program") to purchase up to 6% of outstanding shares of Common Stock, or up to approximately 500,000 shares over 17 months, in open market or privately negotiated transactions. In November 2003, the Board of Directors extended the term of the 2002 Repurchase Program to June 30, 2004. During the first half of 2004, the Company purchased 241,200 shares of its Common Stock for \$2.9 million at an average price of \$12.20 per share. The Company repurchased an aggregate of 455,100 shares of its Common Stock for \$5.1 million at an average price of \$11.15 per share during the entire term of the 2002 Repurchase Program.

In May 2004, the Company announced that the Board of Directors authorized a share repurchase program (the "2004 Repurchase Program") to purchase up to 500,000 of outstanding shares of Common Stock through December 2005 in open market or privately negotiated transactions on or after July 1, 2004. During the second half of 2004, the Company purchased 44,350 shares of its Common Stock for \$0.6 million at an average price of \$12.84 per share. The Company made no share repurchases during 2005.

See Note 4, "Shareholders' Equity" of "Notes to Consolidated Financial Statements" for further discussion of the Company's repurchase programs.

Based on its current operations, management believes that the Company's available cash and cash equivalents, together with cash flow from operations and its bank line of credit, will be sufficient to meet its cash requirements as these currently exist. However, Embrex may continue to explore additional alternative funding opportunities with respect to collaborative ventures and product expansion and would evaluate its cash requirements as appropriate.

## CONTRACTUAL OBLIGATIONS

Embrex's known contractual obligations as of December 31, 2005 are summarized below:

Contractual Obligations	Payments due by period (thousands of dollars)				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Long-term debt obligations	\$11,895	\$963	\$2,889	\$2,889	\$5,154
Capital lease obligations	19	8	11	-	-
Operating lease obligations	3,065	962	2,097	6	-
Purchase obligations	3,853	2,925	861	67	-
<b>Total</b>	<b>\$18,832</b>	<b>\$4,858</b>	<b>\$5,858</b>	<b>\$2,962</b>	<b>\$5,154</b>

The long-term debt obligation listed in the chart represents the total amount due plus interest under Embrex's construction/term loan with BB&T. Embrex borrowed \$9.0 million as of December 31, 2005, and will be obligated to repay the debt as shown in the chart. See Note 3, "Debt," of "Notes to Consolidated Financial Statements" for further discussion of the Company's long-term debt obligation. Long-term debt and certain lease obligations contain acceleration provisions requiring immediate repayment in the event of default as defined in each agreement. Short-term obligations recorded on the consolidated balance sheet equaled \$0.5 million as of December 31, 2005. Of the outstanding purchase obligations included in the table above, a total of \$0.7 million were purchased during 2005.

## OFF-BALANCE SHEET ARRANGEMENTS

The Company does not have any off-balance sheet arrangements that may have a current or future material effect on the Company's financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capitalization resources.

## ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk is the risk of potential loss arising from adverse changes in market rates and prices. The Company's primary market risk exposure is in changes in foreign currency exchange rates. Approximately 37%, 34% and 32% of Embrex's revenues for the years ended December 31, 2005, 2004 and 2003, respectively, were derived from the Company's operations outside the United States. The Company's consolidated financial statements are denominated in U.S. Dollars and, accordingly, changes in the exchange rates between foreign currencies and the U.S. Dollar will affect the translation of the Company's subsidiaries' financial results into U.S. Dollars for purposes

of reporting the Company's consolidated financial results. From 2004 to 2005, select Latin American currencies appreciated against the U.S. Dollar, particularly the Brazilian Real, which appreciated 17% against the U.S. Dollar. Conversely, the Pound Sterling depreciated 1% against the U.S. Dollar. If average exchange rates during 2005 had remained the same as the average exchange rates for these currencies during 2004, then the Company's 2005 revenues would have been approximately \$51.8 million instead of \$52.6 million, representing a year-to-year growth rate of 6% as compared to the actual exchange-adjusted growth rate of 8%.

Accumulated currency translation adjustments recorded as a separate component of shareholders' equity were \$0.3 million at December 31, 2005 as compared with \$0.2 million at December 31, 2004. This \$0.1 million increase was mainly attributable to the overall weakening of the U.S. Dollar with respect to the currencies in which the Company has an exchange rate risk. The primary contributor to the \$0.1 million change in currency translation adjustments was the Latin America region, specifically Brazil. To date, the Company has not utilized any derivative financial instruments or other hedging instruments to affect this exposure.

In addition to currency translation risk described above, the Company is subject to transaction risk. Transaction risk is the risk of potential loss arising from adverse changes in exchange rates from the date invoices are issued until the receipts are collected. Most of Embrex's transaction risk resides in the Company's largest subsidiary, Embrex Europe, where accrued revenues are recorded in the functional currency, British Pounds. However, most of Embrex Europe's revenues are invoiced in U.S. Dollars or Euros. When revenues are collected, there is a risk that changes in the respective exchange rates could cause the amount collected (when converted to British Pounds) to be less than originally accrued. As the Company's business grows in other markets, such as Brazil, it expects that transaction and translation risk may increase in these markets.

As of December 31, 2005, the Company's exposure to market risk for a change in interest rates is related solely to debt outstanding under the term loan used for construction and equipping of the Inovocox<sup>TM</sup> manufacturing facility. At December 31, 2005, the variable rate debt outstanding that is exposed to fluctuations in the market rate of interest under this term loan totaled \$8.6 million. The definitive extent of the Company's interest rate risk under this term loan is not quantifiable or predictable because of the variability of future interest rates and business financing requirements. Based on the current balance outstanding, an increase in the LIBOR rate of 100 basis points would increase the Company's annualized interest expense by approximately \$0.1 million.

**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors and Shareholders of Embrex, Inc.

We have audited the accompanying consolidated balance sheets of Embrex, Inc. as of December 31, 2005 and 2004, and the related consolidated statements of operations, cash flows, and shareholders' equity for each of the three years in the period ended December 31, 2005. Our audits also included the financial statement schedule listed in the Index at Item 15(a). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Embrex, Inc. at December 31, 2005 and 2004, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2005, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Embrex, Inc.'s internal control over financial reporting as of December 31, 2005, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 6, 2006 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Raleigh, North Carolina  
March 6, 2006

**FINANCIAL STATEMENTS**  
**CONSOLIDATED BALANCE SHEETS**

(In thousands, except share and per share amounts)

	<u>December 31,</u>	
	<u>2005</u>	<u>2004</u>
<b>ASSETS</b>		
Current Assets		
Cash and cash equivalents	\$1,975	\$4,469
Restricted cash (Note 1)	116	115
Accounts receivable – trade (net of allowance of \$332 and \$415 in 2005 and 2004, respectively)	7,815	7,816
Inventories:		
Materials and supplies	2,927	2,107
Product	1,377	1,448
Current deferred tax asset (Note 8)	1,149	706
Other current assets	1,970	2,846
Total Current Assets	17,329	19,507
Land	336	147
Devices under construction	3,368	3,055
Devices	52,998	47,379
Less accumulated depreciation	(32,653)	(31,864)
	20,345	15,515
Plant and Equipment (Note 1)	31,869	28,953
Less accumulated depreciation and amortization	(11,371)	(9,704)
	20,498	19,249
Other Assets:		
Intangible assets (net of accumulated amortization of \$682 in 2005 and \$538 in 2004)	5,371	4,025
Long-term deferred tax asset (Note 8)	45	949
Other long-term assets	182	133
Total Other Assets	5,598	5,107
<b>TOTAL ASSETS</b>	<b>\$67,474</b>	<b>\$62,580</b>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current Liabilities		
Accounts payable	\$949	\$887
Accrued expenses	4,647	5,351
Deferred revenue	668	145
Product warranty accrual	149	136
Current portion of long-term debt	463	514
Current portion of capital lease obligations	7	7
Total Current Liabilities	6,883	7,040
Long-term debt, less current portion (Note 3)	8,133	8,516
Capital lease obligations, less current portion	11	2
Shareholders' Equity (Notes 4, 5 and 6)		
Common Stock, \$0.01 par value per share: authorized - 30,000,000 shares; issued and outstanding – 8,134,447 net of 1,674,666 treasury shares and 7,921,605 net of 1,674,666 treasury shares at December 31, 2005 and 2004, respectively	97	95
Additional paid-in capital	67,854	64,938
Accumulated other comprehensive income	349	196
Deferred compensation	(1,318)	(725)
Retained earnings	5,312	2,365
Treasury stock	(19,847)	(19,847)
Total Shareholders' Equity	52,447	47,022
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>	<b>\$67,474</b>	<b>\$62,580</b>

See accompanying notes.

# **CONSOLIDATED STATEMENTS OF OPERATIONS**

(In thousands, except per share amounts)

## **REVENUES**

Device revenues  
Product sales  
Other revenues

Total Revenues

Cost of Device Revenues and Product Sales

Gross Profit

## **OPERATING EXPENSES**

General and administrative  
Sales and marketing  
Research and development

Total Operating Expenses

Operating Income

Other Income (Expense)

Interest income  
Interest expense  
Other income

Total Other Income

Income Before Income Tax Expense

Income Tax Expense (Note 8)

Net Income

Net Income Per Share (Note 10)

Basic  
Diluted

Number of Shares Used in Per Share Calculation (Note 10)

Basic  
Diluted

See accompanying notes.

Year ended December 31,

2005

2004

2003

\$48,741

3,167

684

52,592

22,334

30,258

11,487

4,509

10,692

26,688

3,570

163

(29)

299

433

4,003

1,056

\$2,947

\$0.37

\$0.35

8,007

8,353

\$46,157

2,037

523

48,717

20,147

28,570

10,983

2,939

10,474

24,396

4,174

87

(29)

259

317

4,491

1,178

\$3,313

\$0.42

\$0.40

7,954

8,343

\$43,458

1,970

597

46,025

18,914

27,111

7,119

2,832

12,540

22,491

4,620

163

(20)

3,621

3,764

8,384

773

\$7,611

\$0.94

\$0.91

8,119

8,369



# **CONSOLIDATED STATEMENTS OF CASH FLOWS**

(In thousands)

Year ended December 31,

	<u>2005</u>	<u>2004</u>	<u>2003</u>
<b>Operating Activities</b>			
Net income	\$2,947	\$3,313	\$7,611
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	6,463	5,879	5,320
Gain/(loss) on sale of fixed assets	174	115	(6)
Change in restricted cash	(1)	258	(118)
Change in deferred tax asset	461	968	(1,855)
Restricted stock amortization (Note 5)	694	254	97
Changes in operating assets and liabilities:			
Accounts receivable, inventories and other current assets	368	(1,214)	(2,851)
Accounts payable, accrued expenses, deferred revenue and warranty accrual	(106)	33	1,585
<b>NET CASH PROVIDED BY OPERATING ACTIVITIES</b>	<b>11,000</b>	<b>9,606</b>	<b>9,783</b>
<b>Investing Activities</b>			
Land acquisition	(189)	-0-	(18)
Purchases of devices, equipment, furniture and fixtures	(12,922)	(12,414)	(18,038)
Cash proceeds from sale of devices, equipment, furniture and fixtures	60	53	19
Investments in patents and other non-current assets	(1,562)	(1,562)	1,434
<b>NET CASH PROVIDED BY (USED IN) INVESTING ACTIVITIES</b>	<b>(14,613)</b>	<b>(13,923)</b>	<b>(16,603)</b>
<b>Financing Activities</b>			
Issuance of common stock	1,391	651	1,310
Net change in the line of credit	-	(1,128)	1,128
Drawdown of long-term debt and capital leases	34	2,641	6,364
Repayment of long-term debt, capital lease obligations and other long-term liabilities	(459)	(13)	-
Repurchase of common stock	-0-	(3,512)	(1,343)
<b>NET CASH PROVIDED BY (USED IN) FINANCING ACTIVITIES</b>	<b>966</b>	<b>(1,361)</b>	<b>7,459</b>
<b>CHANGE IN CASH AND CASH EQUIVALENTS</b>	<b>(2,647)</b>	<b>(5,678)</b>	<b>639</b>
<b>CURRENCY TRANSLATION ADJUSTMENTS</b>	<b>153</b>	<b>518</b>	<b>951</b>
<b>CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR</b>	<b>4,469</b>	<b>9,629</b>	<b>8,039</b>
<b>CASH AND CASH EQUIVALENTS AT END OF YEAR</b>	<b>\$1,975</b>	<b>\$4,469</b>	<b>\$9,629</b>

## **SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:**

Total interest paid inclusive of capitalized interest was \$478, \$288 and \$78 for the years ended December 31, 2005, 2004 and 2003, respectively.

Total income taxes paid/(refunded) were (\$26), \$1,052 and \$1,512 for the years ended December 31, 2005, 2004 and 2003, respectively.

See accompanying notes.

# **CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY**

(In thousands)

	Common Stock	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Deferred Compensation	Retained Earnings (Accumulated Deficit)	Treasury Stock	Total
BALANCE AT DECEMBER 31, 2002	\$93	\$61,895	(\$1,273)	\$0	(\$8,559)	(\$14,992)	\$37,164
Stock repurchased						(1,343)	(1,343)
Stock issued:							
Upon exercise of options and issuance of bonus stock	1	308					309
Under employee stock purchase plan		238					238
Issuance of restricted stock		466		(466)			-0-
Amortization of deferred compensation				97			97
Employee compensation		631					631
Payment for services		34					34
Other comprehensive income, net of tax (Note 1):							
Currency translation adjustments			951				951
Net income					7,611		7,611
Comprehensive income							8,562
BALANCE AT DECEMBER 31, 2003	\$94	\$63,572	(\$322)	(\$369)	(\$948)	(\$16,335)	\$45,692
Stock repurchased						(3,512)	(3,512)
Stock issued:							
Upon exercise of options	1	310					311
Under employee stock purchase plan		350					350
Issuance of restricted stock		600		(600)			-0-
Amortization of deferred compensation				244			244
Tax benefits of options & ESPP		106					106
Other comprehensive income, net of tax (Note 1):							
Currency translation adjustments			518				518
Net income					3,313		3,313
Comprehensive income							3,831
BALANCE AT DECEMBER 31, 2004	\$95	\$64,938	\$196	(\$725)	\$2,365	(\$19,847)	\$47,022
Stock repurchased						-0-	-0-
Stock issued:							
Upon exercise of options	2	1,038					1,040
Under employee stock purchase plan		352					352
Issuance of restricted stock		1,287		(1,287)			-0-
Amortization of deferred compensation				694			694
Tax benefits of options & ESPP		239					239
Other comprehensive income, net of tax (Note 1):							
Currency translation adjustments			153				153
Net income					2,947		2,947
Comprehensive income							3,100
BALANCE AT DECEMBER 31, 2005	\$97	\$67,854	\$349	(\$1,318)	\$5,312	(\$19,847)	\$52,447

See accompanying notes.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 1. SIGNIFICANT ACCOUNTING POLICIES

#### **Nature of Business**

Embrex, Inc. (the "Company") is an international biotechnology company specializing in the poultry industry. Embrex is focused on developing patented vaccine and mechanical products that improve bird health, help reduce production costs and provide other economic benefits to the poultry industry. Embrex has developed and commercialized the Inovoject® system, a proprietary, automated in-the-egg injection system which can inoculate 20,000 to 70,000 eggs per hour and eliminates the need for manual, post-hatch injection of certain vaccines. Embrex primarily markets the Inovoject® system through lease arrangements with commercial poultry producers, charging a fee for each egg injected. The Company is also marketing the Egg Remover® system and Vaccine Saver® option to provide additional automation benefits to the poultry hatchery. The Egg Remover® system works alone or in conjunction with the Inovoject® system to remove infertile and early-dead eggs from incubator trays prior to transfer or inoculation through the Inovoject® system. The Vaccine Saver® option for the Inovoject® system identifies infertile and early-dead eggs and selectively prevents vaccination of these eggs. In addition to the Inovoject® and Egg Remover® systems and Vaccine Saver® option, Embrex has developed an antigen-antibody complex technology ("AAC") useful in the development of certain avian vaccines. Based on AAC, the Company has developed and currently is marketing Bursaplex® for protection against avian infectious bursal disease ("IBD").

#### **Principles of Consolidation**

The consolidated financial statements include the accounts of Embrex, Inc. and its wholly owned subsidiaries, Embrex Europe Limited, Embrex France s.a.s., Embrex Iberica, Embrex Poultry Health, LLC, Embrex BioTech Trade (Shanghai) Co., Ltd., Inovoject® do Brasil Ltda., Embrex de Mexico, S. de R.L. de C.V. and Vaccination Services, S. de R.L. de C.V. (collectively, the "Company"). All significant intercompany transactions and accounts have been eliminated. Currently, international operations account for approximately 37% of the Company's revenues.

#### **Cash and Cash Equivalents**

The Company considers all highly liquid investments with a maturity of three months or less when purchased to be cash and cash equivalents.

#### **Restricted Cash**

The Company maintains deposits of restricted cash for VAT import duties and a company credit card.

#### **Fair Value of Financial Instruments**

The carrying value of cash and cash equivalents, restricted cash, accounts receivable, and current liabilities approximate fair values at December 31, 2005 and 2004 due to the short-term nature of these financial instruments.

The carrying value of the Company's long-term debt approximates fair values at December 31, 2005 and 2004 because it is variable-rate debt.

#### **Inventories**

Items recorded as inventory are generally purchased from others and recorded at the lower of cost or market using the average cost method or standard cost method. Materials and supplies inventories include spare parts for the Company's devices as well as laboratory and general supplies. Product inventories consist of biological compounds, principally vaccines based on the Company's AAC technology, Bursaplex® and Newplex™. To date, the Company has not experienced any material inventory obsolescence. However, based on a percentage of the current product and device parts inventory levels, the Company has established a reserve against future device parts obsolescence due to technological improvements and limited shelf life of product inventories. The percentage used to calculate

the reserve is based on a historical percentage rate adjusted for anticipated technological advances on devices and shelf life of existing vaccine product inventories. The consolidated balance reserved for product and parts obsolescence as of December 31, 2005 and 2004 was \$0.3 million for both years..

### Devices

Devices are comprised of egg injection and related equipment, including the Inovoject® system, Egg Remover® system and Vaccine Saver® option, available for lease to customers. The equipment is recorded at the lower of cost or estimated net realizable value. Depreciation is computed principally by using straight-line methods over the estimated useful lives of the equipment and commences after construction is complete and the equipment is placed in service. Repair and maintenance costs are expensed as incurred to cost of revenue and material betterments are capitalized as Devices in the Company's consolidated balance sheets.

### Plant and Equipment

Plant and equipment are recorded at cost. Depreciation is computed principally by using straight-line methods over the estimated useful lives of the assets placed in service, generally three to seven years. The Company's total depreciation expense for 2005, 2004 and 2003 including devices, plant and equipment was \$6.3 million, \$5.7 million and \$5.2 million, respectively. Plant and equipment, at cost, consist of (in thousands):

	<u>At December 31,</u>	
	<u>2005</u>	<u>2004</u>
Plant and equipment		
Office Buildings	\$122	\$ -
Manufacturing buildings and equipment	1,310	745
Construction in progress	13,225	12,063
Leasehold improvements	5,613	5,529
Furniture, office and lab equipment, other	9,164	8,542
Vehicles	<u>2,435</u>	<u>2,074</u>
Total Plant and equipment	\$31,869	\$28,953
Less: accumulated depreciation	<u>(11,371)</u>	<u>(9,704)</u>
Net Plant and equipment	<u>\$20,498</u>	<u>\$19,249</u>

### Intangible Assets

The Company capitalizes legal costs incurred in conjunction with the application for and filing of U.S. patents on internally developed technology, as well as the costs incurred to acquire exclusive licenses of U.S. patents. Exclusive license agreements are amortized over the period of the license, and patents are amortized over the shorter of the useful or legal life of the patent. In some cases, patent infringement lawsuit expenses are capitalized and then amortized using the straight-line method upon successful defense and over the remaining life of the related patent. Trademarks and goodwill are not amortized, but analyzed for impairment annually. During 2005, approximately \$1.2 million of expenses related to patent infringement lawsuits were capitalized. As of December 31, 2005, an aggregate of \$2.0 million of legal expenses related to patent infringement lawsuits currently pending were capitalized. If the lawsuits covered by these expenses are not resolved in the Company's favor, either via settlement or judgment by the applicable court, the capitalized cost will be expensed at the earlier of the time of resolution or when the Company's legal counsel determines that the lawsuits will not be resolved in the Company's favor. In addition, capitalized costs incurred to obtain patents on internally developed technology would be expensed at the time the Company decides to abandon a patent application or a patent is denied. The Company's total amortization expense of intangible assets for 2005, 2004 and 2003 was \$0.2 million, \$0.2 million and \$0.1 million, respectively. The Company estimates amortization of intangible assets will be approximately \$0.2 million per year over the next five years based on current asset values and remaining lives. Net intangible assets consist of (in thousands):

	At December 31,	
	2005	2004
Intangible assets		
Patents and exclusive patent licenses	\$4,583	\$3,189
Goodwill	587	655
Trademarks	163	140
Other intangibles	38	41
Net intangible assets	<u>\$5,371</u>	<u>\$4,025</u>

### Foreign Currency Translation

All assets and liabilities in the balance sheets of the Company's foreign subsidiaries, Embrex Europe Limited, Embrex France s.a.s., Embrex Iberica, Embrex BioTech Trade (Shanghai) Co., Ltd., Inovoject do Brasil Ltda., Embrex de Mexico, S. de R.L. de C.V. and Vaccination Services, S. de R.L. de C.V. are translated at year-end exchange rates except shareholders' equity and any related balance sheet accounts, which are translated at historical rates. Revenues, costs and expenses are recorded at average rates of exchange during the year. Translation gains and losses are accumulated as a component of shareholders' equity. Recognized foreign currency transaction gains and losses are included in determining net income in the other income/ (expense) line item on the consolidated statements of operations.

### Revenue Recognition

Revenues for devices subject to lease agreements are recognized based on eggs processed during the period in accordance with lease terms. Device and product sales are recognized upon delivery, which is when title passes to the customer. Contract research revenue is recognized as services are performed or as milestones are met over the term of the contract. Grant revenue is recognized when expenses related to the specific grants are incurred. Revenue received, but not yet earned, is classified as deferred revenue. The revenue section of the consolidated statements of operations divides revenues into three sections: device revenues, which include revenues derived from a combination of the Company's devices such as Inovoject® system lease fees, Inovoject® system sales, Egg Remover® fees, Egg Remover® sales, Vaccine Saver® fees, Vaccine Saver® sales and Inovoject® system distributor royalties; product sales, all or most of which is derived from sales of Bursaplex®, the Company's *in ovo* IBD vaccine; and other revenues, which include revenues derived from contract research and development, grant sources and other minor products.

### Cost of Revenue

Cost of revenue includes costs associated with servicing the Company's Inovoject® systems and other devices around the world. These costs include replacement parts, labor, travel, depreciation, property taxes and related shipping costs. Cost of revenue also includes the costs associated with sales of products and devices.

### Research and Development Costs

Research and development costs, including costs incurred to complete contract research, are charged to operations when incurred and are included in operating expenses.

### Advertising Expenses

Advertising expenses include costs associated with creating and printing marketing materials along with the cost of trade shows and other marketing materials needed for these events. The Company has incurred \$0.2 million for these activities for each of the years ended December 31, 2005, 2004 and 2003, respectively.

### Income Taxes

The Company accounts for income taxes under the provisions of Statement of Financial Accounting Standards ("SFAS") No. 109, "Accounting for Income Taxes" ("SFAS 109"). SFAS 109 requires recognition of deferred tax

assets and liabilities for the expected future tax consequences of temporary basis differences that have arisen between financial statement and income tax reporting.

### **Net Income Per Share**

Basic net income per share is determined by dividing net income by the weighted average number of common shares outstanding during each year. Diluted net income per share is based on the average number of shares used for the basic net income per share calculation, adjusted for the dilutive effect of stock options, restricted stock and restricted stock units.

### **Use of Estimates**

The presentation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from these estimates.

### **Principal Customers**

Tyson Foods, Inc. ("Tyson") accounted for approximately 17%, 18% and 20% of consolidated 2005, 2004 and 2003 revenues, respectively. Pilgrim's Pride Inc. ("Pilgrim's") accounted for approximately 11%, 12% and 12% of consolidated 2005, 2004 and 2003 revenues, respectively. In 2005, 2004 and 2003, Tyson and Pilgrim's were the only customers that represented greater than 10% of total revenues.

### **Concentration of Credit Risk**

The Company's principal financial instrument, subject to potential concentration of credit risk, is accounts receivable, which is unsecured. As of December 31, 2005, both Pilgrim's and Tyson accounted for 11% of consolidated accounts receivable. As of December 31, 2004, Pilgrim's and Tyson's accounted for 15% and 11% of consolidated accounts receivable, respectively. Substantially all of the Company's accounts receivable is due from companies in the poultry industry.

### **Sources of Supply**

#### *General*

Embrex currently outsources the production of all of its mechanical and vaccine products, with the exception of the Vaccine Saver® option, and expects to continue to do so for the foreseeable future. The Company believes that alternative sources of manufacture and supply generally exist. The Company signed a purchase commitment in January 2004 that will require the Company to purchase minimum amounts of bursal disease antibody ("BDA") over the three-year term of the contract. The Company produced its Inovocox™ vaccine in-house at the Embrex Poultry Health manufacturing facility in 2005 for USDA registration field trials.

#### *Inovoject® System, Egg Remover® System and Vaccine Saver® Option*

Embrex's in-house engineering staff designs the Inovoject® system, Vaccine Saver® option and Egg Remover® system, which incorporate proprietary mechanical, pneumatic and electronic sub-systems and concepts. The Company uses one contract manufacturer, Precision Automation Company, Inc., to fabricate its Inovoject® systems and Egg Remover® systems. While other machine fabricators exist and have constructed limited numbers of these devices, a change in fabricators could cause a delay in manufacturing and a possible delay in the timing of future Inovoject® and Egg Remover® system installations and revenues from those installations. The Vaccine Saver® option is assembled in the manufacturing area at the Company's corporate headquarters from components that are sourced from multiple vendors.

### *AAC (Antigen-Antibody Complex) Vaccines*

Since 1993, Charles River Laboratories, Inc., through its SPAFAS Avian Products Services Division ("SPAFAS"), has supplied Embrex with the BDA component for Bursaplex® vaccine. In January 2004, Embrex signed a new agreement with SPAFAS under which SPAFAS will continue to supply the Company's requirements for BDA through 2006. In connection with this agreement, Embrex seeks to maintain appropriate inventory levels and places orders with SPAFAS to allow Embrex to satisfy anticipated customer demand for the Bursaplex® vaccine. The regulatory approval granted by the USDA for Bursaplex® vaccine in 1997 specifically covers vaccines produced with SPAFAS-manufactured BDA. Additional agreements covering the Company's needs for Newcastle disease antibody ("NDA") for the Company's Newplex™ vaccine for the next four years are in negotiation with SPAFAS.

The Company has a non-exclusive manufacturing agreement with Merial Select, Inc. ("Select") (a Merck and Sanofi-Aventis company) under which Select manufactures, in the United States, the Company's Bursaplex® vaccine, an IBD virus-antibody complex vaccine, for Embrex to market worldwide. Abic Ltd. ("Abic") has been granted similar rights to manufacture and market an IBD AAC vaccine, known as GuMBryo™, in Israel. The Company has also granted Lohmann Animal Health International ("LAHI") non-exclusive rights to manufacture, in the United States, the Company's Newcastle vaccine, Newplex™, based on Embrex's AAC technology. The manufacture of vaccines by Select, Abic and LAHI, along with the manufacture of specific vaccine antibodies by SPAFAS, generally must be performed in licensed facilities or under approved regulatory methods. Although there are other manufacturers who should be capable of manufacturing Bursaplex®, Newplex™ and the related BDA and NDA components, a change of supplier for the Company could adversely affect Embrex's future operating results due to the time it would take a new supplier to obtain regulatory approval of its production process or manufacturing facilities. The Company seeks to minimize this exposure through multi-year supply agreements and the maintenance of adequate inventories.

### **Comprehensive Income**

SFAS No. 130, "Reporting Comprehensive Income" ("SFAS 130"), establishes standards for reporting and display of comprehensive income and its components in the financial statements. In accordance with SFAS 130, the Company has determined total comprehensive income net of tax to be \$3.1 million, \$3.8 million and \$8.6 million for the years ended December 31, 2005, 2004 and 2003, respectively. The Company's total comprehensive income represents net income plus the after-tax effect of foreign currency translation adjustments for the years presented as summarized below (in thousands):

	<u>2005</u>	<u>2004</u>	<u>2003</u>
Net Income	\$2,947	\$3,313	\$7,611
Currency translation adjustment	<u>153</u>	<u>518</u>	<u>951</u>
Comprehensive income	<u>\$3,100</u>	<u>\$3,831</u>	<u>\$8,562</u>

## Segments

The Company operates in a single segment. The table below presents the Company's operations by geographic area (in thousands):

	<u>2005</u>	<u>2004</u>	<u>2003</u>
U.S. Revenue:			
Device Revenues	\$32,701	\$31,812	\$30,760
Product Sales	-	11	25
Other Revenues	563	421	507
Total United States Revenues	<u>33,264</u>	<u>32,244</u>	<u>31,292</u>
International Revenue:			
Device Revenues	16,041	14,345	12,698
Product Sales	3,167	2,026	1,945
Other Revenues	120	102	90
Total International Revenues	<u>19,328</u>	<u>16,473</u>	<u>14,733</u>
Total Consolidated Revenues	<u>\$52,592</u>	<u>\$48,717</u>	<u>\$46,025</u>
Assets:			
United States	\$51,885	\$48,613	\$48,770
International	15,589	13,967	10,947
Total Assets	<u>\$67,474</u>	<u>\$62,580</u>	<u>\$59,717</u>
Depreciation and Amortization Expense:			
United States	\$3,914	\$3,620	\$3,226
International	2,549	2,259	2,094
Total Depreciation and Amortization Expense	<u>\$6,463</u>	<u>\$5,879</u>	<u>\$5,320</u>

## Stock-Based Compensation

The Company's stock plans (the "Plans") are designed to provide incentives to eligible employees, officers and directors in the form of awards of restricted stock, restricted stock units, stock appreciation rights, incentive stock options and non-qualified stock options, as well as the Employee Stock Purchase Plan. The Company accounts for the Plans under the recognition and measurement principles of Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB 25"), and related interpretations. No stock-based employee compensation cost is reflected in net income with respect to options granted under the Plans, as all options granted under the Plans had an exercise price equal to the market value of the underlying common stock on the date of grant. Net income does reflect the compensation cost of restricted stock awards and restricted stock unit awards granted, which are amortized over the respective vesting periods for such awards. The following table illustrates the effect on net income and earnings per share if the Company had applied the fair value recognition provisions of SFAS No. 123, "Accounting for Stock-Based Compensation" ("SFAS 123"), as amended by SFAS No. 148, "Accounting for Stock-Based Compensation—Transition and Disclosure" ("SFAS 148"), for all awards granted (in thousands, except per share amounts):



	Year Ended December 31,		
	<u>2005</u>	<u>2004</u>	<u>2003</u>
Net income, as reported	\$2,947	\$3,313	\$7,611
Add: Non-cash stock-based compensation included in net income, net of related tax effects	523	188	88
Deduct: Total stock-based compensation expense determined under fair value based method for all awards, net of related tax effects	<u>(1,224)</u>	<u>(1,316)</u>	<u>(1,503)</u>
Pro forma net income	<u>\$2,246</u>	<u>\$2,185</u>	<u>\$6,196</u>
Earnings per share:			
Basic—as reported	<u>\$0.37</u>	<u>\$0.42</u>	<u>\$0.94</u>
Basic—pro forma	<u>\$0.28</u>	<u>\$0.27</u>	<u>\$0.76</u>
Diluted—as reported	<u>\$0.35</u>	<u>\$0.40</u>	<u>\$0.91</u>
Diluted—pro forma	<u>\$0.27</u>	<u>\$0.26</u>	<u>\$0.74</u>

The Company computes fair value for purposes of SFAS 123 using the Black-Scholes option pricing model. The weighted-average assumptions used in this model to estimate fair value and resulting values are as follows:

	Stock Option Plans			Employee Stock Purchase Plan		
	<u>2005</u>	<u>2004</u>	<u>2003</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>
Expected dividend yield	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Risk-free interest rate	3.6%	3.1%	2.5%	3.5%	1.6%	1.3%
Expected volatility	57.0%	57.0%	57.0%	57.0%	57.0%	57.0%
Expected life (in years)	4.5	5.2	5.2	1.0	1.0	0.9
Weighted-average fair value per share	\$5.70	\$6.19	\$4.91	\$4.31	\$4.62	\$4.95

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options, which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions including the expected stock price volatility. Because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of the awards granted under the Plans.

#### **Impact of Recently Issued Accounting Standards**

In December 2004, the Financial Accounting Standards Board ("FASB") issued SFAS No. 123 (revised 2004), "Share-Based Payment" ("SFAS 123(R)"). SFAS 123(R), a revision of SFAS 123, supersedes APB 25 and amends SFAS No. 95, "Statement of Cash Flows." SFAS 123(R) requires all share-based payments to employees, including grants of employee stock options, to be recognized in the financial statements based on their fair values. SFAS 123(R) is effective for the beginning of the first interim or annual period beginning after December 31, 2005. Therefore, the Company adopted SFAS 123(R) on January 1, 2006. The Company is currently evaluating the two fair value pricing methods permitted by SFAS 123(R) and has not selected a final fair value pricing model nor determined the impact such model will have on the Company's consolidated financial statements.

In November 2004, the FASB issued SFAS No. 151, "Inventory Costs" ("SFAS 151"). SFAS 151 amends the guidance in Accounting Research Bulletin ("ARB") No. 43, Chapter 4, "Inventory Pricing," to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs and wasted material (spoilage).

SFAS 151 requires that those items be recognized as current period charges regardless of whether they meet the criterion of "so abnormal." In addition, SFAS 151 requires that allocation of fixed production overheads to the costs of conversion be based on the normal capacity of the production facilities. The adoption of SFAS 151 is not expected to have a material impact on the financial statements of the Company.

In May 2005, the FASB issued SFAS No. 154, "Accounting Changes and Error Corrections" ("SFAS 154"), which replaces APB Opinion No. 20, "Accounting Changes" ("APB 20"), and FASB Statement No. 3, "Reporting Accounting Changes in Interim Financial Statements." SFAS 154 applies to all voluntary changes in accounting principle and modifies the requirements for accounting for and reporting a change in accounting principle. SFAS 154 requires retrospective application to prior periods' financial statements of a voluntary change in accounting principle unless it is impracticable. SFAS 154 requires that a change in method of depreciation, amortization or depletion for long-lived, non-financial assets be accounted for as a change in accounting estimate that is affected by a change in accounting principle. APB 20 previously required that such a change be reported as a change in accounting principle. The adoption of SFAS 154 is not expected to have a material impact on the financial statements of the Company.

## 2. LEASES

At December 31, 2005, the Company had approximately \$42 thousand of assets financed by capital lease agreements. At December 31, 2004, the Company had approximately \$20 thousand of assets financed by capital lease agreements.

The Company leases its facilities under a number of operating leases extending through November 2007. The Company has the option to cancel one of its operating lease agreements with the payment of a \$0.2 million penalty. Total rent expense was \$1.1 million, \$1.0 million and \$0.9 million for the years ended December 31, 2005, 2004 and 2003, respectively. The lease on the Company's corporate headquarters had an initial six-year term expiring in 2005 with annual rent increases of approximately 3% and an additional six-year optional renewal term with annual rent increases of approximately 4%. In October 2004, the Company exercised its option to extend the lease for the first two years of the six-year optional renewal term. In addition, the lease at Embrex's research facility has a 10-year term expiring in November 2007, with a five-year renewal option and annual increases of approximately 3% through the first 10 years and approximately 4% during the five-year renewal term.

At December 31, 2005, the Company's minimum future commitments under operating leases were as follows (in thousands):

	<u>Operating Leases</u>
2006	\$ 962
2007	927
2008	669
2009	501
Thereafter	<u>6</u>
Total	<u>\$3,065</u>

## 3. DEBT

The Company obtained a \$9.0 million construction/term loan from its bank, Branch Banking and Trust Company ("BB&T"), in August 2003, to be used for construction and equipping of Embrex Poultry Health, LLC, the Company's Inovocox™ vaccine manufacturing facility located in Scotland County, North Carolina. The interest rate of the loan is based on the one-month LIBOR rate plus 1.65%, which was 5.96% as of December 31, 2005. The loan has a term of 138 months or 11.5 years with payments of interest only for the first 18 months. Principal repayment on the loan began in March 2005 at the end of the interest only period, and equal monthly installments of principal plus interest are payable over the remainder of the loan term. At December 31, 2005, \$8.6 million of the construction/term loan was outstanding.

Interest costs of \$0.4 million, \$0.3 million and \$0.1 million related to the term loan for construction of the Embrex Poultry Health manufacturing facility are not reflected in the interest expense totals for 2005, 2004, and 2003, respectively. These amounts are being capitalized as part of the construction cost of the facility. Depreciation of the capitalized interest costs will begin when the related assets are placed in service.

#### 4. SHAREHOLDERS' EQUITY

At December 31, 2005, the Company had reserved a total of 2,353,994 shares of its Common Stock for future issuance as follows:

For exercise of Common Stock options, for possible awards of Common Stock, and for possible settlement of Restricted Stock Units or Stock Appreciation Rights in Common Stock, in each case, to employees and others under the Company's Amended and Restated Incentive Stock Option and Nonstatutory Stock Option Plan.....	2,098,410
For possible future issuance to employees and others under employee stock purchase plans.....	<u>255,584</u>
Total reserved .....	<u>2,353,994</u>

At December 31, 2005, the Company had no issued and outstanding warrants to purchase Common Stock.

In August 2002, the Company announced that the Board of Directors authorized a share repurchase program (the "2002 Repurchase Program") to purchase up to 6% of outstanding shares of Common Stock, or up to approximately 500,000 shares over 17 months, in open market or privately negotiated transactions. In November 2003, the Board of Directors extended the term of the 2002 Repurchase Program to June 30, 2004. During 2002, the Company purchased 66,500 shares of its Common Stock for \$0.8 million at an average price of \$11.88 per share. During 2003, the Company purchased 147,400 shares of its Common Stock for \$1.3 million at an average price of \$9.11 per share. During the first half of 2004, the Company purchased 241,200 shares of its Common Stock for \$2.9 million at an average price of \$12.20 per share under the 2002 Repurchase Program. During the entire term of the 2002 Repurchase Program, the Company repurchased an aggregate of 455,100 shares of Common Stock for \$5.1 million at an average price of \$11.15 per share.

In May 2004, the Company announced that the Board of Directors authorized a share repurchase program (the "2004 Repurchase Program") to purchase up to 500,000 of outstanding shares of Common Stock through December 2005, in open market or privately negotiated transactions on or after July 1, 2004. During the second half of 2004, the Company purchased 44,350 shares of its Common Stock for \$0.6 million at an average price of \$12.84 per share under the 2004 Repurchase Program. The Company made no share repurchases during 2005.

The Company has purchased a total of 1,674,666 shares for \$19.8 million at an average price of \$11.83 per share under all repurchase programs to date.

#### 5. STOCK COMPENSATION PLANS

The Company's Plans are designed to provide incentives to eligible employees, officers and directors in the form of awards of stock, restricted stock units, stock appreciation rights, incentive stock options and non-qualified stock options. As of December 31, 2005, a total of 2,098,410 shares of Common Stock have been reserved for future issuance under the Plans. Of this amount, 507,582 shares are available for future stock-based awards.

During the years ended December 31, 2005, 2004 and 2003, the Company made aggregate stock awards of 114,940, 48,400 and 51,500 shares of Common Stock, respectively. The stock awards issued during the year ended December 31, 2005 were subject to a four-year vesting schedule. Previous stock awards were fully vested on the date of grant as they were granted in lieu of a cash bonus. The compensation expense recognized in connection with stock awards was \$0.7 million, \$0.3 million and \$0.1 million for the years ended December 31, 2005, 2004 and 2003, respectively. As of December 31, 2005, the amount of unamortized compensation expense related to stock awards was \$1.3 million.

Stock options generally vest and become exercisable over a four-year period and expire 10 years from the date of grant. In general, the exercise price of stock options is the closing price of the Company's Common Stock on the date of grant.

Stock option activity with respect to all of the Plans follows:

	<u>Options Outstanding</u>	<u>Weighted-Average Exercise Price</u>
Balance at December 31, 2002	1,594,759	\$ 11.31
Granted	209,735	9.69
Exercised	(52,845)	5.85
Canceled	<u>(57,348)</u>	14.33
Balance at December 31, 2003	1,694,301	11.21
Granted	193,075	13.09
Exercised	(70,146)	7.10
Canceled	<u>(44,298)</u>	14.25
Balance at December 31, 2004	1,772,932	11.50
Granted	2,000	11.57
Exercised	(151,594)	6.86
Canceled	<u>(32,510)</u>	14.80
Balance at December 31, 2005	<u>1,590,828</u>	<u>\$ 11.88</u>

The Company's exercisable stock options as of December 31, 2005, 2004 and 2003 were 1,324,922, 1,269,778 and 1,091,678, respectively.

Selected information regarding stock options as of December 31, 2005 follows:

Exercise Price	Number Outstanding	<u>Options Outstanding</u>		<u>Options Currently Exercisable</u>	
		Weighted-Average Remaining Contractual Life (yrs.)	Weighted-Average Exercise Price	Number Exercisable	Weighted-Average Exercise Price
\$ 4.84 – \$ 6.88	401,683	2.0	\$ 5.79	401,683	\$ 5.79
\$ 7.00 – \$11.80	402,597	5.4	\$ 10.08	314,282	\$ 10.17
\$13.00 – \$15.63	476,805	6.3	\$ 14.62	361,856	\$ 15.10
\$15.94 – \$17.99	309,743	6.1	\$ 17.90	247,101	\$ 17.87
	<u>1,590,828</u>	4.9	\$ 11.88	<u>1,324,922</u>	\$ 11.63

## 6. EMPLOYEE STOCK PURCHASE PLAN

The Company maintains an Employee Stock Purchase Plan for its U.S.-based employees (the "U.S. Purchase Plan") and a similar plan for some of its employees outside the U.S. (the "Non-U.S. Purchase Plan," and together with the U.S. Purchase Plan, the "Purchase Plans") to provide an additional opportunity for the Company's employees to share in the ownership of the Company. Under terms of each of the Purchase Plans, all regular full-time employees of the Company (or the Company's subsidiaries) may make voluntary payroll contributions thereby enabling them to purchase Common Stock. Contributions are limited to 20% of an employee's compensation. As of December 31, 2005, the number of shares that may be issued under the Purchase Plans together shall not exceed 500,000. Of this amount, 255,584 shares are available for future purchases. The purchase price of the stock is the lesser of 85% of the fair market value on the first business day of the plan year, which runs from July 1 in one year to June 30 in the

succeeding year, or 85% of the fair market value on the date of exercise, which can occur at any time during the plan year, as determined by each participating employee.

Under the Purchase Plans, there were 36,584, 37,429 and 31,007 shares of Common Stock purchased during 2005, 2004 and 2003, respectively.

## 7. 401(k) RETIREMENT SAVINGS PLAN

The Company has a 401(k) Plan that is available to all U.S.-based employees who are at least 18 years of age. Employer contributions are voluntary at the discretion of the Company.

Historically, under its 401(k) Plan, Embrex has based participant and employer contributions on participants' salary. In the third quarter of 2005, the Company discovered that the 401(k) Plan documents prepared by its third party administrator provide (and the Company believes incorrectly) that other elements of compensation be included when determining the appropriate contributions. The Company's intent always has been that contributions be based only on base salary. The Company intends to seek approval to conform the 401(k) Plan document retroactively to its intent and practice. Should this relief not be granted, the Company believes it would be required to make additional contributions to the 401(k) Plan for participants who had not already reached the maximum contribution. The Company is unable to estimate at this time the amount of additional contributions that potentially could be required and for what time periods.

Company contributions to the 401(k) Plan amounted to \$0.5 million for the year ended December 31, 2005, and \$0.4 million for each year ended December 31, 2004 and 2003, respectively.

## 8. INCOME TAXES

The Company's income before income taxes separated by those operations subject to foreign and United States tax jurisdictions for years ended December 31, 2005, 2004 and 2003 are listed as follows (in thousands):

	2005	2004	2003
Total income before taxes for operations subject to foreign tax jurisdictions:	\$617	(\$287)	\$2,903
Total income before taxes for operations subject to United States tax jurisdiction:	3,386	4,778	5,481
Income before taxes	<u>\$4,003</u>	<u>\$4,491</u>	<u>\$8,384</u>

The components of income tax expense (benefit) for the years ended December 31, 2005, 2004 and 2003 are as follows (in thousands):

	2005	2004	2003
Current:			
Federal	\$(434)	(\$450)	\$2,297
State	67	121	251
Foreign	962	539	548
Total Current	595	210	3,096
Deferred	461	968	(2,323)
Total	<u>\$1,056</u>	<u>\$1,178</u>	<u>\$773</u>

The Company's consolidated effective tax rate differed from the statutory rate as set forth below for the years ended December 31, 2005, 2004 and 2003 as follows (in thousands):

	2005	2004	2003
Federal taxes at statutory rate	\$1,361	\$1,527	\$2,850
State and local income taxes, net of federal benefit	77	173	222
Non-deductible expenses and credits	89	(40)	(220)
Extra-territorial income exclusion benefit	(735)	(587)	-0-
Other	(235)	(628)	(143)
Foreign losses for which no benefit has been recognized/foreign earnings offset by foreign net operating losses	75	103	(809)
Change in valuation allowance	156	231	(1,675)
Foreign taxes	268	399	548
	<u>\$1,056</u>	<u>\$1,178</u>	<u>\$773</u>

Deferred income taxes reflect the net effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The tax effects of temporary differences and carry-forwards that give rise to deferred tax assets and liabilities consist of the following (in thousands):

	<u>At December 31,</u>	
	2005	2004
Deferred tax assets (liabilities):		
Book under tax depreciation and amortization	(\$1,509)	(\$1,665)
Patent costs	(1,212)	(681)
Research and experimental tax credit carry-forwards	3,302	3,524
Accrued liabilities and reserves	1,329	737
Foreign net operating loss carry-forwards	323	370
Alternative minimum tax credit carry-forward	234	426
Total deferred tax assets	<u>2,467</u>	<u>2,711</u>
Valuation allowance for deferred tax assets	<u>(1,273)</u>	<u>(1,056)</u>
Net deferred tax assets	<u>\$1,194</u>	<u>\$1,655</u>

During 2005, 2004 and 2003, the valuation allowance (increased)/decreased by (\$0.2 million), (\$0.2 million) and \$1.7 million, respectively.

In addition, the Company has research and experimental tax credit carry-forwards totaling approximately \$3.3 million, which are available to offset future federal income taxes. These credits expire during the years 2006 through 2023.

## 9. COMMITMENTS AND CONTINGENCIES

The Company has certain contractual obligations due to mortgage financing of the Inovocox™ manufacturing facility, capital leases, operating leases related to office and storage space rentals and purchase obligations related to the manufacturing of devices, serum and vaccines and the purchase of other miscellaneous supplies. The terms of these obligations vary from less than a year to 10 years. The total amount of these contractual obligations is \$18.8 million. The amounts payable over the next five years are \$7.5 million during 2006 and 2007, \$3.3 million during 2008 and 2009 and \$1.0 million during 2010.

The Company is engaged in certain legal and administrative proceedings incidental to its normal business activities. While it is not possible to determine the ultimate outcome of those actions, in the opinion of management after discussion with legal counsel, it is unlikely that the outcome of such litigation and other proceedings will have a

material adverse effect on the results of the Company's operations or its financial position, except that capitalized costs related to lawsuits could be expensed in future periods. See "Intangible Assets" under Note 1, "Significant Accounting Policies," above.

The Company operates in multiple tax jurisdictions and significant judgment is required in determining its worldwide provision for income taxes. In the ordinary course of a global business, there are many transactions for which the ultimate tax outcome is uncertain. Although the Company believes its approach to determining its various tax provisions is reasonable, no assurance can be given that the final outcome will not be materially different from that which is reflected in the Company's historical income tax provision and accruals upon review by taxing authorities. The Company believes that adequate amounts of tax and related interest and penalties, if any, have been reserved for any adjustments that may result from years open to examination from taxing authorities. As of December 31, 2005, \$0.9 million had been reserved. As of December 31, 2004, \$1.5 million had been reserved.

## 10. NET INCOME PER SHARE

The following table sets forth the computation of basic and diluted net income per share (in thousands, except per share amounts):

	2005	2004	2003
Numerator:			
Net income	\$2,947	\$3,313	\$7,611
Denominator:			
Denominator for basic net income per share—weighted-average	8,007	7,954	8,119
Effect of Dilutive Securities:			
Employee Stock Options	301	365	245
Restricted Stock Grants	45	24	5
Dilutive Potential Shares	346	389	250
Denominator for diluted net income per share — adjusted weighted-average shares and assumed option exercises	8,353	8,343	8,369
Basic net income per share	\$0.37	\$0.42	\$0.94
Diluted net income per share	\$0.35	\$0.40	\$0.91

For the diluted net income per share denominator, 803, 803 and 919 shares underlying outstanding stock options were excluded from the calculation for 2005, 2004 and 2003, respectively, because the exercise price of such options exceeded the average closing share price of the Company's Common Stock during the applicable year and thus are non-dilutive.

## SUPPLEMENTAL FINANCIAL INFORMATION

### SUMMARY OF OPERATIONS BY QUARTERS (UNAUDITED)

The selected financial data below should be read in conjunction with the Company's consolidated financial statements and related notes contained in this Item 8.

(In thousands, except per share amounts)

	<u>2005</u>				<u>2004</u>			
	<u>1st Qtr</u>	<u>2nd Qtr</u>	<u>3rd Qtr</u>	<u>4th Qtr</u>	<u>1st Qtr</u>	<u>2nd Qtr</u>	<u>3rd Qtr</u>	<u>4th Qtr</u>
Revenues	\$12,763	\$13,018	\$13,328	\$13,483	\$11,956	\$11,727	\$12,765	\$12,269
Gross Profit	\$7,270	\$7,531	\$7,697	\$7,760	\$7,120	\$6,953	\$7,633	\$6,864
Net income	\$610	\$1,246	\$660	\$431	\$1,109	\$808	\$770	\$626

	<u>2005</u>				<u>2004</u>			
	<u>1st Qtr</u>	<u>2nd Qtr</u>	<u>3rd Qtr</u>	<u>4th Qtr</u>	<u>1st Qtr</u>	<u>2nd Qtr</u>	<u>3rd Qtr</u>	<u>4th Qtr</u>
Net income per share								
Basic	\$0.08	\$0.16	\$0.08	\$0.05	\$0.14	\$0.10	\$0.10	\$0.08
Diluted	\$0.07	\$0.15	\$0.08	\$0.05	\$0.13	\$0.10	\$0.09	\$0.08
Weighted-average number of shares used in per share calculation								
Basic	7,935	7,964	8,010	8,106	8,034	7,960	7,919	7,911
Diluted	8,255	8,278	8,340	8,471	8,346	8,268	8,290	8,220

### ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

### ITEM 9A. CONTROLS AND PROCEDURES

#### Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) that are designed to provide reasonable assurances that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to management, including the Company's Chief Executive Officer and Vice President, Finance and Administration (the Company's Chief Financial Officer), as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that disclosure controls and procedures, no matter how well designed and operated, can provide only reasonable assurances of achieving the



desired control objectives, as the Company's are designed to do, and management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

An evaluation was carried out under the supervision and with the participation of the Company's management, including its Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer believe, as of the end of the period covered by this report, the Company's disclosure controls and procedures are effective in that they provide reasonable assurances that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms.

### **Changes to Internal Control Over Financial Reporting**

We routinely review our internal control over financial reporting and from time to time make changes intended to enhance the effectiveness of our internal control over financial reporting. As a result, the Company has made changes in its internal control over financial reporting which are summarized below. The Company made no changes in its internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the fiscal quarter ending December 31, 2005 that have materially affected, or are reasonably likely to materially affect, its internal control over financial reporting.

### **Management's Report on Internal Control Over Financial Reporting**

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control system is designed to provide reasonable assurance to the Company's management and board of directors regarding the preparation and fair presentation of published financial statements.

The Company's internal control over financial reporting includes those policies and procedures that:

- (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
- (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

The Company's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2005. In making its assessment of internal control over financial reporting, management used the criteria issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control-Integrated Framework. Based on its assessment using those criteria, management has concluded that, as of December 31, 2005, the Company's internal control over financial reporting was effective.

The Company's independent registered public accounting firm has issued an attestation report on management's assessment of the Company's internal control over financial reporting below.

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders of Embrex, Inc.

We have audited management's assessment, included in the accompanying Management's Report on Internal Control over Financial Reporting, that Embrex, Inc. maintained effective internal control over financial reporting as of December 31, 2005, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Embrex, Inc.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assessment that Embrex, Inc. maintained effective internal control over financial reporting as of December 31, 2005, is fairly stated, in all material respects, based on the COSO criteria. Also, in our opinion, Embrex, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2005, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Embrex, Inc. as of December 31, 2005 and 2004, and the related consolidated statements of operations, cash flows, and shareholders' equity for each of the three years in the period ended December 31, 2005 of Embrex, Inc. and our report dated March 6, 2006 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Raleigh, North Carolina  
March 6, 2006

**ITEM 9B. OTHER INFORMATION**

Not applicable.

**PART III****ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT**

Information on the Company's executive officers and directors is incorporated by reference from the sections captioned "Management" and "Proposal 1: Election of Directors" of the Company's Proxy Statement with respect to the Annual Meeting of Shareholders to be held on May 18, 2006 to be filed with the Securities and Exchange Commission.

Embrex has adopted a code of ethics applicable to its directors, officers (including its principal executive officer, principal financial officer and principal accounting officer or controller, or persons performing similar functions) and employees. The Company makes its code of ethics available on the Company's Internet website, [www.embrex.com](http://www.embrex.com). The Company intends to post on its Internet website any amendments to, or waivers from, its code of ethics that apply to its principal executive officer, principal financial officer and principal accounting officer or controller, or persons performing similar functions, promptly following any such amendment or waiver.

**ITEM 11. EXECUTIVE COMPENSATION**

This information is incorporated by reference from the sections captioned "Executive Compensation," "Report of the Compensation Committee of the Board of Directors," "Compensation of Directors," and "Comparison of Cumulative Total Return" of the Company's Proxy Statement with respect to the Annual Meeting of Shareholders to be held on May 18, 2006 to be filed with the Securities and Exchange Commission

**ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS****EQUITY COMPENSATION PLAN INFORMATION**

The following table sets forth information as of December 31, 2005 with respect to compensation plans under which equity securities of the Company are authorized for issuance.

<b>Plan Category</b>	<b>Number of securities to be issued upon exercise of outstanding options, warrants and rights</b>	<b>Weighted average exercise price of outstanding options, warrants and rights</b>	<b>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in the first column (1))</b>
Equity compensation plans approved by security holders	1,590,828	\$11.88	763,166
Equity compensation plans not approved by security holders	-0-	Not Applicable	-0-
<b>Total</b>	<b>1,590,828</b>	<b>\$11.88</b>	<b>763,166</b>

(1) The Company's stock plans (the "Stock Plans") are designed to provide incentives to eligible employees, officers and directors through grants in the form of awards of stock, restricted stock units, stock appreciation rights, incentive stock options and non-qualified stock options. The Stock Plans provide for a maximum number of shares of Common Stock that may be issued with respect to all such awards but do not reserve a portion of such maximum for particular types of awards. Thus, any award of one type of stock-based compensation will reduce the number of shares available for future grants with respect to the other types of stock-based compensation. The Company maintains an Employee Stock Purchase Plan for its U.S.-based employees (the "U.S. Purchase Plan") and a similar plan for some of its employees outside the U.S. (the "Non-U.S. Purchase Plan," and together with the U.S. Purchase Plan, the "Purchase Plans") to provide an additional opportunity for the Company's employees to share in the ownership of the Company. As of December 31, 2005, 507,582 shares of Common Stock remain available for future issuance with respect to stock-based compensation grants under the Stock Plans and 255,584 shares of Common Stock remain available for purchase under the Purchase Plans.

The remainder of the information required to be included under this Item 12 is incorporated by reference from the section captioned "Share Ownership of Management and Certain Beneficial Owners" of the Company's Proxy Statement with respect to the Annual Meeting of Shareholders to be held on May 18, 2006 to be filed with the Securities and Exchange Commission.

### **ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS**

Not applicable.

### **ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

This information is incorporated by reference from the sections captioned "Independent Registered Public Accounting Firm Fees" and "Policy on Audit Committee Pre-Approval of Audit and Non-Audit Services of Independent Auditor" of the Company's Proxy Statement with respect to the Annual Meeting of Shareholders to be held on May 18, 2006 to be filed with the Securities and Exchange Commission.

## **PART IV**

### **ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES**

(a)(1) The consolidated financial statements listed below are included in Item 8 of this report.

Report of Independent Registered Public Accounting Firm

Consolidated Financial Statements

Consolidated Balance Sheets at December 31, 2005 and 2004

Consolidated Statements of Operations for each of the years ended December 31, 2005, 2004 and 2003

Consolidated Statements of Cash Flows for each of the years ended December 31, 2005, 2004 and 2003

Consolidated Statements of Shareholders' Equity for each of the years ended December 31, 2005, 2004 and 2003

Notes to Consolidated Financial Statements

(a)(2) Financial Statement Schedule

Schedule II – Valuation and Qualifying Accounts (appears following Signatures in this report)

All other schedules for which provision is made in the applicable accounting regulations of the SEC are not required under the related instructions, are included within the consolidated financial statements or the notes

thereto in the Company's Annual Report on Form 10-K for the period ended December 31, 2005, or are inapplicable and, therefore, have been omitted.

(a)(3) The exhibits listed below are filed as part of this report. Executive compensation plans and arrangements are listed in Exhibits 10.11 through 10.56.

Exhibit Number	Description
3.1	Restated Articles of Incorporation (incorporated herein by reference to Exhibit 3.1 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1991, as filed with the Securities and Exchange Commission on March 30, 1992)
3.2	Articles of Amendment of Restated Articles of Incorporation, effective March 21, 1996 (incorporated herein by reference to Exhibit 3.2 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1995, as filed with the Securities and Exchange Commission on April 1, 1996)
3.3	Articles of Amendment of Restated Articles of Incorporation, effective May 28, 1996 (incorporated herein by reference to Exhibit 3 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 1996, as filed with the Securities and Exchange Commission on August 12, 1996)
3.4	Amended and Restated Bylaws, effective September 21, 2000 (incorporated herein by reference to Exhibit 3 to Embrex's Quarterly Report on Form 10-Q for the three months period ended September 30, 2000, as filed with the Securities and Exchange Commission on November 9, 2000)
4.1	Reference is made to Exhibits 3.1, 3.2, 3.3 and 3.4
4.2	Specimen of Common Stock Certificate (incorporated herein by reference to Exhibit 4.2 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997)
4.3	Rights Agreement dated as of March 21, 1996 between Embrex and Branch Banking and Trust Company, as Rights Agent (incorporated herein by reference to Exhibit 1 to Embrex's Registration Statement on Form 8-A filed with the Securities and Exchange Commission on March 22, 1996)
4.4	Amendment to Rights Agreement dated as of January 6, 2003 between Embrex and Branch Banking and Trust Company, as Rights Agent (incorporated herein by reference to Exhibit 4.1 to Embrex's Current Report on Form 8-K, as filed with the Securities and Exchange Commission on January 9, 2003)
10.1	Collaborative Research Agreement dated January 17, 1989 between Embrex and the University of Arkansas (asterisks located within the exhibit denote information that has been deleted pursuant to a request for confidential treatment filed with the Securities and Exchange Commission) (incorporated herein by reference to Exhibit 10.9 to Embrex's Registration Statement on Form S-1 (Registration No. 33-42482), as filed with the Securities and Exchange Commission on August 29, 1991)
10.2	License Agreement dated October 1, 1988 between Embrex and the National Technical Information Service, a primary operating unit of the United States Department of Commerce (asterisks located within the exhibit denote information that has been deleted pursuant to a request for confidential treatment filed with the Securities and Exchange Commission) (incorporated herein by reference to Exhibit 10.10 to Embrex's Registration Statement on Form S-1 (Registration No. 33-42482), as filed with the Securities and Exchange Commission on August 29, 1991)
10.3	Lease Agreement dated December 9, 1986 between Embrex, as tenant, and Imperial Center Partnership and Petula Associates, Ltd., as landlord, as amended by First Amendment dated June 11, 1987, Second Amendment dated December 1, 1988, and Third Amendment dated May 2, 1989 (incorporated herein by reference to Exhibit 10.11 to Embrex's Registration Statement on Form S-1 (Registration No. 33-42482), as filed with the Securities and Exchange Commission on August 29, 1991)

- 10.4 Lease for Royal Center II dated October 13, 1997 between the Company and Petula Associates, Ltd. (incorporated herein by reference to Exhibit 10.9 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1997, as filed with the Securities and Exchange Commission on March 30, 1998)
- 10.5 Sublease Agreement dated October 1, 1999, between Embrex, as subtenant, and Wandel & Goltermann Technologies, Inc., as sublandlord (incorporated herein by reference to Exhibit 10.9 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1999, as filed with the Securities and Exchange Commission on March 24, 2000)
- 10.6 First Amendment to Sublease Agreement dated February 29, 2000, among Wandel & Goltermann Technologies, Inc., Embrex and W & G Associates (incorporated herein by reference to Exhibit 10.10 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1999, as filed with the Securities and Exchange Commission on March 24, 2000)
- 10.7 Subtenant Non-Disturbance and Substitute Lease Agreement dated January 16, 2004 between Embrex and W & G Associates, L.P. (incorporated herein by reference to Exhibit 10.8 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 2004, as filed with the Securities and Exchange Commission on March 15, 2005)
- 10.8 First Amendment to Substitute Lease Agreement dated October 1, 2004 between Embrex and W & G Associates, L.P. (incorporated herein by reference to Exhibit 10.9 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 2004, as filed with the Securities and Exchange Commission on March 15, 2005)
- 10.9 Unrestricted Grant Agreement dated November 1, 1986, between Embrex and North Carolina State University, as Amended by Amendment dated May 3, 1989, Amendment dated September 15, 1989, and Amendment dated April 22, 1991 (incorporated herein by reference to Exhibit 10.14 to Embrex's Registration Statement on Form S-1 (Registration No. 33-42482), as filed with the Securities and Exchange Commission on August 29, 1991)
- 10.10 Basic Research Agreement dated October 24, 1989, between Embrex and University of Arkansas, as amended on October 23, 1990, February 1, 1991 and July 22, 1991 (incorporated herein by reference to Exhibit 10.15 to Embrex's Registration Statement on Form S-1 (Registration No. 33-42482), as filed with the Securities and Exchange Commission on August 29, 1991)
- 10.11 1988 Incentive Stock Option Plan and form of Incentive Stock Option Agreement (incorporated herein by reference to Exhibit 10.16 to Embrex's Registration Statement on Form S-1 (Registration No. 33-42482), as filed with the Securities and Exchange Commission on August 29, 1991)
- 10.12 1991 Nonstatutory Stock Option Plan and form of Nonstatutory Stock Option Agreement (incorporated herein by reference to Exhibit 10.18 to Embrex's Registration Statement on Form S-1 (Registration No. 33-42482), as filed with the Securities and Exchange Commission on August 29, 1991)
- 10.13 Incentive Stock Option and Nonstatutory Stock Option Plan and forms of Stock Option Agreements – June 1993 (incorporated herein by reference to Exhibit 10.19 to Embrex's Annual Report on Form 10-KSB for the fiscal year ended December 31, 1992, as filed with the Securities and Exchange Commission on March 31, 1993)
- 10.14 Amendment dated May 16, 1996 to Incentive Stock Option and Nonstatutory Stock Option Plan – June 1993 (incorporated herein by reference to Exhibit 10 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 1996, as filed with the Securities and Exchange Commission on August 12, 1996)
- 10.15 Amended and Restated Incentive Stock Option and Nonstatutory Stock Option Plan – May 1998 (incorporated herein by reference to Exhibit 10 to Embrex's Registration Statement on Form S-8 (Registration No. 333-56279), as filed with the Securities and Exchange Commission on June 8, 1998)
- 10.16 Amended and Restated Incentive Stock Option and Nonstatutory Stock Option Plan – January 1999 and form of Stock Option Agreement (incorporated herein by reference to Exhibit 10.3 to Embrex's Quarterly Report on Form 10-Q for the three months ended March 31, 1999, as filed with the Securities and Exchange Commission on May 12, 1999)
- 10.17 Amended and Restated Incentive Stock Option and Nonstatutory Stock Option Plan – July 2000 (incorporated herein by reference to Exhibit 99.1 to Embrex's Registration Statement on Form S-8 (Registration No. 333-42676), as filed with the Securities and Exchange Commission on July 31, 2000)

- 10.18      Amendment dated May 16, 2002 to Amended and Restated Incentive Stock Option and Nonstatutory Stock Option Plan – July 2000 (incorporated herein by reference to Exhibit 10.1 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 2002, as filed with the Securities and Exchange Commission on August 12, 2002)
- 10.19      Amendment dated July 18, 2002 to Amended and Restated Incentive Stock Option and Nonstatutory Stock Option Plan – July 2000 (incorporated herein by reference to Exhibit 10.2 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 2002, as filed with the Securities and Exchange Commission on August 12, 2002)
- 10.20      Form of Restricted Stock Agreement under Amended and Restated Incentive Stock Option and Nonstatutory Stock Option Plan of the Company (incorporated herein by reference to Exhibit 10.5 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 2003, as filed with the Securities and Exchange Commission on August 5, 2003)
- 10.21      Form of Stock Option Agreement under Amended and Restated Incentive Stock Option and Nonstatutory Stock Option Plan of the Company (incorporated herein by reference to Exhibit 10.6 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 2003, as filed with the Securities and Exchange Commission on August 5, 2003)
- 10.22      Amended and Restated Incentive Stock Option and Nonstatutory Option Plan – February 2005 (incorporated herein by reference to Exhibit 10.1 to Embrex's Current Report on Form 8-K, as filed with the Securities and Exchange Commission on March 22, 2005)
- 10.23      Amended and Restated Incentive Stock Option and Nonstatutory Stock Option Plan – February 2006
- 10.24      Form of Stock Appreciation Right Agreement (incorporated herein by reference to Exhibit 10.2 to Embrex's Current Report on Form 8-K, as filed with the Securities and Exchange Commission on March 22, 2005)
- 10.25      Form of Non-Employee Director Restricted Stock Unit Agreement (incorporated herein by reference to Exhibit 10.3 to Embrex's Current Report on Form 8-K, as filed with the Securities and Exchange Commission on March 22, 2005)
- 10.26      Form of Restricted Stock Unit Agreement for Employees (incorporated herein by reference to Exhibit 10.4 to Embrex's Current Report on Form 8-K, as filed with the Securities and Exchange Commission on March 22, 2005)
- 10.27      Amended and Restated Employee Stock Purchase Plan – November 1996 (incorporated herein by reference to Exhibit 10.18 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997)
- 10.28      Amended and Restated Employee Stock Purchase Plan – July 2000 (incorporated herein by reference to Exhibit 99.2 to Embrex's Registration Statement on Form S-8 (Registration No. 333-42676), as filed with the Securities and Exchange Commission on July 31, 2000)
- 10.29      Amendment dated July 18, 2002 to Amended and Restated Employee Stock Purchase Plan – July 2000 (incorporated herein by reference to Exhibit 10.3 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 2002, as filed with the Securities and Exchange Commission on August 12, 2002)
- 10.30      Amendment dated May 15, 2003 to Amended and Restated Employee Stock Purchase Plan (incorporated herein by reference to Exhibit 99.2 to Embrex's Registration Statement on Form S-8 (Registration No. 333-105924), as filed with the Securities and Exchange Commission on June 6, 2003)
- 10.31      Amended and Restated Employee Stock Purchase Plan for Non-U.S. Employees – July 2000 (incorporated herein by reference to Exhibit 99.3 to Embrex's Registration Statement on Form S-8 (Registration No. 333-42676), as filed with the Securities and Exchange Commission on July 31, 2000)
- 10.32      Amendment dated February 6, 2003 to Amended and Restated Non-U.S. Employee Stock Purchase Plan (incorporated herein by reference to Exhibit 99.1 to Embrex's Registration Statement on Form S-8 (Registration No. 333-105924), as filed with the Securities and Exchange Commission on June 6, 2003)

- 10.33 Amendment dated May 15, 2003 to Amended and Restated Non-U.S. Employee Stock Purchase Plan (incorporated herein by reference to Exhibit 99.3 to Embrex's Registration Statement on Form S-8 (Registration No. 333-105924), as filed with the Securities and Exchange Commission on June 6, 2003)
- 10.34 Employment Agreement dated November 15, 1989, between Embrex and Randall L. Marcuson (incorporated herein by reference to Exhibit 10.19 to Embrex's Registration Statement on Form S-1 (Registration No. 33-42482), as filed with the Securities and Exchange Commission on August 29, 1991)
- 10.35 Amendment to Employment Agreement dated May 21, 1996 between Embrex and Randall L. Marcuson (incorporated herein by reference to Exhibit 10.20 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997)
- 10.36 Change In Control Severance Agreement dated May 21, 1996 between Embrex and Randall L. Marcuson (incorporated herein by reference to Exhibit 10.21 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997)
- 10.37 Amendment to Change in Control Severance Agreement dated October 1, 1998 between Embrex and Randall L. Marcuson (incorporated herein by reference to Exhibit 10.23 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1998, as filed with the Securities and Exchange Commission on March 31, 1999)
- 10.38 Employment Agreement dated October 16, 1989, between Embrex and Catherine A. Ricks (incorporated herein by reference to Exhibit 10.21 to Embrex's Registration Statement on Form S-1 (Registration No. 33-42482), as filed with the Securities and Exchange Commission on August 29, 1991)
- 10.39 Change In Control Severance Agreement dated May 21, 1996 between Embrex and Catherine A. Ricks (incorporated herein by reference to Exhibit 10.23 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997)
- 10.40 Amendment to Change in Control Severance Agreement dated October 1, 1998 between Embrex and Catherine A. Ricks (incorporated herein by reference to Exhibit 10.26 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1998, as filed with the Securities and Exchange Commission on March 31, 1999)
- 10.41 Terms and Conditions of Employment between Embrex Europe Limited and David M. Baines dated May 12, 1994 (incorporated herein by reference to Exhibit 10.37 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1995, as filed with the Securities and Exchange Commission on April 1, 1996)
- 10.42 Change In Control Severance Agreement dated June 9, 1996 between Embrex and David M. Baines (incorporated herein by reference to Exhibit 10.27 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997)
- 10.43 Amendment to Change in Control Severance Agreement dated October 1, 1998 between Embrex and David M. Baines (incorporated herein by reference to Exhibit 10.32 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1998, as filed with the Securities and Exchange Commission on March 31, 1999)
- 10.44 Letter Agreement and General Provisions to Employment Agreement dated August 20, 1996 between Embrex and Don T. Seaquist and Amendment to Employment Agreement dated September 9, 1996 between Embrex and Don T. Seaquist (incorporated herein by reference to Exhibit 10.28 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997)
- 10.45 Change In Control Severance Agreement dated September 9, 1996 between Embrex and Don T. Seaquist (incorporated herein by reference to Exhibit 10.29 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997)
- 10.46 Amendment to Change in Control Severance Agreement dated October 1, 1998 between Embrex and Don T. Seaquist (incorporated herein by reference to Exhibit 10.35 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1998, as filed with the Securities and Exchange Commission on March 31, 1999)
- 10.47 Letter Agreement and General Provisions to Employment Agreement dated February 3, 1999 between Embrex and Brian C. Hrudka (incorporated herein by reference to Exhibit 10.39 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1998, as filed with the Securities and Exchange Commission on March 31, 1999)



- 10.48 Change In Control Severance Agreement dated March 24, 1999 between Embrex and Brian C. Hrudka (incorporated herein by reference to Exhibit 10.40 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1998, as filed with the Securities and Exchange Commission on March 31, 1999)
- 10.49 Letter Agreement and General Provisions to Employment Agreement dated May 23, 1997 between Embrex and Joseph P. O'Dowd (incorporated herein by reference to Exhibit 10.41 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 2002, as filed with the Securities and Exchange Commission on March 28, 2003)
- 10.50 Amendment to Employment Agreement dated May 1, 2001 between Embrex and Joseph P. O'Dowd (incorporated herein by reference to Exhibit 10.42 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 2002, as filed with the Securities and Exchange Commission on March 28, 2003)
- 10.51 Change In Control Severance Agreement dated April 12, 2002 between Embrex and Joseph P. O'Dowd (incorporated herein by reference to Exhibit 10.1 to Embrex's Quarterly Report on Form 10-Q for the three months ended March 31, 2003, as filed with the Securities and Exchange Commission on May 13, 2003)
- 10.52 Amendment to Change in Control Agreement dated September 4, 2003 between Embrex and Joseph P. O'Dowd (incorporated herein by reference to Exhibit 10.3 to Embrex's Quarterly Report on Form 10-Q for the three months ended September 30, 2003, as filed with the Securities and Exchange Commission on November 4, 2003)
- 10.53 Indemnification Agreement among Embrex, Randall L. Marcuson, Charles E. Austin, C. Daniel Blackshear, Lester M. Crawford, D.V.M. Ph.D., Peter J. Holzer, Kenneth N. May, Ph.D., and Arthur M. Pappas dated as of April 1, 1999 (incorporated herein by reference to Exhibit 10.2 to Embrex's Quarterly Report on Form 10-Q for the three months ended March 31, 1999, as filed with the Securities and Exchange Commission on May 12, 1999)
- 10.54 Amendment to Indemnification Agreement among Embrex, John E. Klein and Walter V. Smiley dated as of May 17, 2001 (incorporated herein by reference to Exhibit 10.45 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 2001, as filed with the Securities and Exchange Commission on March 22, 2002)
- 10.55 Amendment to Indemnification Agreement between Embrex and Ganesh M. Kishore dated as of January 14, 2002 (incorporated herein by reference to Exhibit 10.46 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 2001, as filed with the Securities and Exchange Commission on March 22, 2002)
- 10.56 Amendment to Indemnification Agreement among Embrex, Inc. and David L. Castaldi dated as of January 13, 2003 (incorporated herein by reference to Exhibit 10.1 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 2003, as filed with the Securities and Exchange Commission on August 5, 2003)
- 10.57 Agreement dated as of January 22, 1996 between Embrex and Merial Select, Inc., as successor to Select Laboratories, Inc. (asterisks located within the exhibit denote information that has been deleted pursuant to a request for confidential treatment filed with the Securities and Exchange Commission) (incorporated herein by reference to Exhibit 10.32 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1995, as filed with the Securities and Exchange Commission on April 1, 1996)
- 10.58 Letter Agreement dated as of January 22, 1996 between Merial Select, Inc., as successor to Select Laboratories, Inc., and Embrex (incorporated herein by reference to Exhibit 10.33 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1995, as filed with the Securities and Exchange Commission on April 1, 1996)
- 10.59 License dated as of January 22, 1996 granted by Merial Select, Inc., as successor to Select Laboratories, Inc., to Embrex (asterisks located within the exhibit denote information that has been deleted pursuant to a request for confidential treatment filed with the Securities and Exchange Commission) (incorporated herein by reference to Exhibit 10.34 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1995, as filed with the Securities and Exchange Commission on April 1, 1996)
- 10.60 Loan Agreement between Embrex and Branch Banking and Trust Company dated as of April 7, 1999 (incorporated herein by reference to Exhibit 10.1 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 1999, as filed with the Securities and Exchange Commission on August 12, 1999)

- 10.61 License and Royalty Agreement between Embrex and Pfizer, Inc. and its Affiliates dated as of June 22, 2001 (asterisks located within the exhibit denote information that has been deleted pursuant to a request for confidential treatment filed with the Securities and Exchange Commission) (incorporated herein by reference to Exhibit 10.1 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 2001, as filed with the Securities and Exchange Commission on August 13, 2001)
- 10.62 Credit Agreement between Embrex and Advanced Automation, Inc. dated as of April 1, 2001 (incorporated herein by reference to Exhibit 10.1 to Embrex's Quarterly Report on Form 10-Q for the three months ended September 30, 2001, as filed with the Securities and Exchange Commission on November 9, 2001)
- 10.63 Term Loan and Security Agreement between Embrex and Advanced Automation, Inc. dated as of April 30, 2003 (incorporated herein by reference to Exhibit 10.7 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 2003, as filed with the Securities and Exchange Commission on August 5, 2003)
- 10.64 Services Agreement between Embrex and Advanced Automation, Inc. dated as of April 30, 2003 (incorporated herein by reference to Exhibit 10.8 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 2003, as filed with the Securities and Exchange Commission on August 5, 2003)
- 10.65 Engineering, Procurement, and Construction Agreement dated November 26, 2002 between Embrex and Lockwood Greene E&C, L.L.C. (incorporated herein by reference to Exhibit 10.58 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 2002, as filed with the Securities and Exchange Commission on March 28, 2003)
- 10.66 Loan Agreement dated August 6, 2003 between Embrex and Branch Banking and Trust (incorporated herein by reference to Exhibit 10.1 to Embrex's Quarterly Report on Form 10-Q for the three months ended September 30, 2003, as filed with the Securities and Exchange Commission on November 4, 2003)
- 10.67 Promissory Note dated August 6, 2003 of Embrex payable to Branch Banking and Trust (incorporated herein by reference to Exhibit 10.2 to Embrex's Quarterly Report on Form 10-Q for the three months ended September 30, 2003, as filed with the Securities and Exchange Commission on November 4, 2003)
- 10.68 BDA Production and Supply Agreement dated January 29, 2004 between Embrex and Charles River Laboratories, Inc. (asterisks located within the exhibit denote information that has been deleted pursuant to a request for confidential treatment filed with the Securities and Exchange Commission) (incorporated herein by reference to Exhibit 10.1 to Embrex's Quarterly Report on Form 10-Q for the three months ended March 31, 2004, as filed with the Securities and Exchange Commission on May 4, 2004)
- 21 Subsidiaries
- 23 Consent of Ernst & Young LLP, independent registered public accounting firm, to the incorporation of their report dated March 6, 2006 with respect to the consolidated financial statements and schedule of Embrex, Inc. included in this Form 10-K and of their attestation report dated March 6, 2006, regarding management's assessment of the Company's internal control over financial reporting and the effectiveness of the Company's internal control over financial reporting in the Registration Statements on Form S-3 (Registration Nos. 333-18231 and 333-31811), as filed with the Securities and Exchange Commission on December 19, 1996 and July 22, 1997, respectively, and into the Registration Statements on Form S-8 (Registration Nos. 33-51582, 33-63318, 333-04109, 333-56279, 333-42676, 333-91304 and 333-105924), as filed with the Securities and Exchange Commission on September 1, 1992, May 25, 1993, May 20, 1996, June 8, 1998, July 31, 2000, June 27, 2002, and June 6, 2003, respectively
- 24 Powers of Attorney (included in the signature page for this report)
- 31.1 Certification of Principal Executive Officer of Periodic Report Pursuant to Rule 13a-14(a) or Rule 15d-14(a)
- 31.2 Certification of Principal Financial Officer of Periodic Report Pursuant to Rule 13a-14(a) or Rule 15d-14(a)
- 32.1 Certification of Principal Executive Officer of Periodic Report Pursuant to Rule 13a-14(b) or Rule 15d-14(b) and 18 U.S.C. Section 1350
- 32.2 Certification of Principal Financial Officer of Periodic Report Pursuant to Rule 13a-14(b) or Rule 15d-14(b) and 18 U.S.C. Section 1350

## SIGNATURES AND POWER OF ATTORNEY

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

### EMBREX, INC.

Date: March 8, 2006

By: /s/ Randall L. Marcuson  
Randall L. Marcuson  
President and Chief Executive  
Officer

We, the undersigned directors and officers of Embrex, Inc. (the "Company"), do hereby constitute and appoint Randall L. Marcuson and Don T. Seaquist, or either of them, our true and lawful attorneys-in-fact and agents, with full power of substitution, to execute and deliver an Annual Report on Form 10-K pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Act"), with respect to the year ended December 31, 2005 (the "Report"), to be filed with the Securities and Exchange Commission, and to do any and all acts and things and to execute any and all instruments for us and in our names in the capacities indicated below, which said attorneys-in-fact and agents, or either of them, may deem necessary or advisable to enable the Company to comply with the Act and any rules, regulations and requirements of the Securities and Exchange Commission in connection with the Report, including without limitation the power and authority to execute and deliver for us or any of us in our names and in the capacities indicated below any and all amendments to the Report; and we do hereby ratify and confirm all that the said attorneys-in-fact and agents, or either of them, shall do or cause to be done by virtue of this power of attorney.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Randall L. Marcuson</u> Randall L. Marcuson	President, Chief Executive Officer and Director	March 8, 2006
<u>/s/ Don T. Seaquist</u> Don T. Seaquist	Vice President, Finance and Administration (Principal Financial and Accounting Officer)	March 8, 2006
<u>/s/ C. Daniel Blackshear</u> C. Daniel Blackshear	Director	March 8, 2006
<u>/s/ David L. Castaldi</u> David L. Castaldi	Director	March 8, 2006
<u>/s/ Peter J. Holzer</u> Peter J. Holzer	Director	March 8, 2006
<u>/s/ Ganesh M. Kishore, Ph.D.</u> Ganesh M. Kishore, Ph.D.	Director	March 8, 2006
<u>/s/ John E. Klein</u> John E. Klein	Director	March 8, 2006

# FINANCIAL STATEMENT SCHEDULE

## SCHEDULE II – VALUATION AND QUALIFYING ACCOUNTS EMBREX, INC. AND CONSOLIDATED SUBSIDIARIES

(In thousands)

(In thousands)	ADDITIONS				
DESCRIPTION	BALANCE AT BEGINNING OF PERIOD	CHARGED TO COSTS AND EXPENSES	CHARGED TO OTHER ACCOUNTS	DEDUCTIONS	BALANCE AT END OF PERIOD
YEAR ENDED DECEMBER 31, 2005					
Allowance for doubtful accounts	\$415	\$ 24	(14)	(\$94)	\$ 331
Inventory valuation allowance	296	120	(3)	(126)	287
Warranty reserve	136	38	(3)	(21)	150
Amortization of intangible assets	538	167	0	(23)	682
Valuation allowance for deferred tax asset	1,056	156	61	0	1,273
Employee fringe benefit plan (a)	153	2,525	0	(2,482)	196
YEAR ENDED DECEMBER 31, 2004					
Allowance for doubtful accounts	\$418	\$45	0	(48)	415
Inventory valuation allowance	298	103	0	(105)	296
Warranty reserve	288	(122)	0	(30)	136
Amortization of intangible assets	410	185	12	(69)	538
Valuation allowance for deferred tax asset	288	231	537	0	1,056 (b)
Employee fringe benefit plan (a)	320	1,825	0	(1,992)	153
YEAR ENDED DECEMBER 31, 2003					
Allowance for doubtful accounts	\$247	\$182	0	(\$11)	\$418
Inventory valuation allowance	224	146	0	(72)	298
Warranty reserve	270	18	0	0	288
Amortization of intangible assets	275	135	0	0	410
Valuation allowance for deferred tax asset	1,963	0	0	(1,675)	288
Employee fringe benefit plan (a)	220	1,914	0	(1,814)	320

(a) The Company has established a reserve related to Embrex's employee fringe benefit plan. The most significant component of the accrual is the amount reserved for the employee self-insured health plan. The amount of the reserve is based on management's estimate of future employee health claims. The reserve covers expected short-term claims and is based on historical data adjusted for major events and anticipated changes in headcount or participation.

(b) Adjustment to record gross components of foreign deferred tax assets (fully reserved).

Charged To Other Accounts is primarily composed of foreign currency gains and losses.

## EXHIBIT INDEX

Exhibit Number	Description
3.1	Restated Articles of Incorporation (incorporated herein by reference to Exhibit 3.1 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1991, as filed with the Securities and Exchange Commission on March 30, 1992)
3.2	Articles of Amendment of Restated Articles of Incorporation, effective March 21, 1996 (incorporated herein by reference to Exhibit 3.2 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1995, as filed with the Securities and Exchange Commission on April 1, 1996)
3.3	Articles of Amendment of Restated Articles of Incorporation, effective May 28, 1996 (incorporated herein by reference to Exhibit 3 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 1996, as filed with the Securities and Exchange Commission on August 12, 1996)
3.4	Amended and Restated Bylaws, effective September 21, 2000 (incorporated herein by reference to Exhibit 3 to Embrex's Quarterly Report on Form 10-Q for the three months period ended September 30, 2000, as filed with the Securities and Exchange Commission on November 9, 2000)
4.1	Reference is made to Exhibits 3.1, 3.2, 3.3 and 3.4
4.2	Specimen of Common Stock Certificate (incorporated herein by reference to Exhibit 4.2 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997)
4.3	Rights Agreement dated as of March 21, 1996 between Embrex and Branch Banking and Trust Company, as Rights Agent (incorporated herein by reference to Exhibit 1 to Embrex's Registration Statement on Form 8-A filed with the Securities and Exchange Commission on March 22, 1996)
4.4	Amendment to Rights Agreement dated as of January 6, 2003 between Embrex and Branch Banking and Trust Company, as Rights Agent (incorporated herein by reference to Exhibit 4.1 to Embrex's Current Report on Form 8-K, as filed with the Securities and Exchange Commission on January 9, 2003)
10.1	Collaborative Research Agreement dated January 17, 1989 between Embrex and the University of Arkansas (asterisks located within the exhibit denote information that has been deleted pursuant to a request for confidential treatment filed with the Securities and Exchange Commission) (incorporated herein by reference to Exhibit 10.9 to Embrex's Registration Statement on Form S-1 (Registration No. 33-42482), as filed with the Securities and Exchange Commission on August 29, 1991)
10.2	License Agreement dated October 1, 1988 between Embrex and the National Technical Information Service, a primary operating unit of the United States Department of Commerce (asterisks located within the exhibit denote information that has been deleted pursuant to a request for confidential treatment filed with the Securities and Exchange Commission) (incorporated herein by reference to Exhibit 10.10 to Embrex's Registration Statement on Form S-1 (Registration No. 33-42482), as filed with the Securities and Exchange Commission on August 29, 1991)
10.3	Lease Agreement dated December 9, 1986 between Embrex, as tenant, and Imperial Center Partnership and Petula Associates, Ltd., as landlord, as amended by First Amendment dated June 11, 1987, Second Amendment dated December 1, 1988, and Third Amendment dated May 2, 1989 (incorporated herein by reference to Exhibit 10.11 to Embrex's Registration Statement on Form S-1 (Registration No. 33-42482), as filed with the Securities and Exchange Commission on August 29, 1991)
10.4	Lease for Royal Center II dated October 13, 1997 between the Company and Petula Associates, Ltd. (incorporated herein by reference to Exhibit 10.9 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1997, as filed with the Securities and Exchange Commission on March 30, 1998)
10.5	Sublease Agreement dated October 1, 1999, between Embrex, as subtenant, and Wandel & Goltermann Technologies, Inc., as sublandlord (incorporated herein by reference to Exhibit 10.9 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1999, as filed with the Securities and Exchange Commission on March 24, 2000)

- 10.6 First Amendment to Sublease Agreement dated February 29, 2000, among Wandel & Goltermann Technologies, Inc., Embrex and W & G Associates (incorporated herein by reference to Exhibit 10.10 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1999, as filed with the Securities and Exchange Commission on March 24, 2000)
- 10.7 Subtenant Non-Disturbance and Substitute Lease Agreement dated January 16, 2004 between Embrex and W & G Associates, L.P. (incorporated herein by reference to Exhibit 10.8 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 2004, as filed with the Securities and Exchange Commission on March 15, 2005)
- 10.8 First Amendment to Substitute Lease Agreement dated October 1, 2004 between Embrex and W & G Associates, L.P. (incorporated herein by reference to Exhibit 10.9 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 2004, as filed with the Securities and Exchange Commission on March 15, 2005)
- 10.9 Unrestricted Grant Agreement dated November 1, 1986, between Embrex and North Carolina State University, as Amended by Amendment dated May 3, 1989, Amendment dated September 15, 1989, and Amendment dated April 22, 1991 (incorporated herein by reference to Exhibit 10.14 to Embrex's Registration Statement on Form S-1 (Registration No. 33-42482), as filed with the Securities and Exchange Commission on August 29, 1991)
- 10.10 Basic Research Agreement dated October 24, 1989, between Embrex and University of Arkansas, as amended on October 23, 1990, February 1, 1991 and July 22, 1991 (incorporated herein by reference to Exhibit 10.15 to Embrex's Registration Statement on Form S-1 (Registration No. 33-42482), as filed with the Securities and Exchange Commission on August 29, 1991)
- 10.11 1988 Incentive Stock Option Plan and form of Incentive Stock Option Agreement (incorporated herein by reference to Exhibit 10.16 to Embrex's Registration Statement on Form S-1 (Registration No. 33-42482), as filed with the Securities and Exchange Commission on August 29, 1991)
- 10.12 1991 Nonstatutory Stock Option Plan and form of Nonstatutory Stock Option Agreement (incorporated herein by reference to Exhibit 10.18 to Embrex's Registration Statement on Form S-1 (Registration No. 33-42482), as filed with the Securities and Exchange Commission on August 29, 1991)
- 10.13 Incentive Stock Option and Nonstatutory Stock Option Plan and forms of Stock Option Agreements – June 1993 (incorporated herein by reference to Exhibit 10.19 to Embrex's Annual Report on Form 10-KSB for the fiscal year ended December 31, 1992, as filed with the Securities and Exchange Commission on March 31, 1993)
- 10.14 Amendment dated May 16, 1996 to Incentive Stock Option and Nonstatutory Stock Option Plan – June 1993 (incorporated herein by reference to Exhibit 10 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 1996, as filed with the Securities and Exchange Commission on August 12, 1996)
- 10.15 Amended and Restated Incentive Stock Option and Nonstatutory Stock Option Plan – May 1998 (incorporated herein by reference to Exhibit 10 to Embrex's Registration Statement on Form S-8 (Registration No. 333-56279), as filed with the Securities and Exchange Commission on June 8, 1998)
- 10.16 Amended and Restated Incentive Stock Option and Nonstatutory Stock Option Plan – January 1999 and form of Stock Option Agreement (incorporated herein by reference to Exhibit 10.3 to Embrex's Quarterly Report on Form 10-Q for the three months ended March 31, 1999, as filed with the Securities and Exchange Commission on May 12, 1999)
- 10.17 Amended and Restated Incentive Stock Option and Nonstatutory Stock Option Plan – July 2000 (incorporated herein by reference to Exhibit 99.1 to Embrex's Registration Statement on Form S-8 (Registration No. 333-42676), as filed with the Securities and Exchange Commission on July 31, 2000)
- 10.18 Amendment dated May 16, 2002 to Amended and Restated Incentive Stock Option and Nonstatutory Stock Option Plan – July 2000 (incorporated herein by reference to Exhibit 10.1 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 2002, as filed with the Securities and Exchange Commission on August 12, 2002)

- 10.19      Amendment dated July 18, 2002 to Amended and Restated Incentive Stock Option and Nonstatutory Stock Option Plan – July 2000 (incorporated herein by reference to Exhibit 10.2 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 2002, as filed with the Securities and Exchange Commission on August 12, 2002)
- 10.20      Form of Restricted Stock Agreement under Amended and Restated Incentive Stock Option and Nonstatutory Stock Option Plan of the Company (incorporated herein by reference to Exhibit 10.5 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 2003, as filed with the Securities and Exchange Commission on August 5, 2003)
- 10.21      Form of Stock Option Agreement under Amended and Restated Incentive Stock Option and Nonstatutory Stock Option Plan of the Company (incorporated herein by reference to Exhibit 10.6 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 2003, as filed with the Securities and Exchange Commission on August 5, 2003)
- 10.22      Amended and Restated Incentive Stock Option and Nonstatutory Option Plan – February 2005 (incorporated herein by reference to Exhibit 10.1 to Embrex's Current Report on Form 8-K, as filed with the Securities and Exchange Commission on March 22, 2005)
- 10.23      Amended and Restated Incentive Stock Option and Nonstatutory Stock Option Plan – February 2006
- 10.24      Form of Stock Appreciation Right Agreement (incorporated herein by reference to Exhibit 10.2 to Embrex's Current Report on Form 8-K, as filed with the Securities and Exchange Commission on March 22, 2005)
- 10.25      Form of Non-Employee Director Restricted Stock Unit Agreement (incorporated herein by reference to Exhibit 10.3 to Embrex's Current Report on Form 8-K, as filed with the Securities and Exchange Commission on March 22, 2005)
- 10.26      Form of Restricted Stock Unit Agreement for Employees (incorporated herein by reference to Exhibit 10.4 to Embrex's Current Report on Form 8-K, as filed with the Securities and Exchange Commission on March 22, 2005)
- 10.27      Amended and Restated Employee Stock Purchase Plan – November 1996 (incorporated herein by reference to Exhibit 10.18 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997)
- 10.28      Amended and Restated Employee Stock Purchase Plan – July 2000 (incorporated herein by reference to Exhibit 99.2 to Embrex's Registration Statement on Form S-8 (Registration No. 333-42676), as filed with the Securities and Exchange Commission on July 31, 2000)
- 10.29      Amendment dated July 18, 2002 to Amended and Restated Employee Stock Purchase Plan – July 2000 (incorporated herein by reference to Exhibit 10.3 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 2002, as filed with the Securities and Exchange Commission on August 12, 2002)
- 10.30      Amendment dated May 15, 2003 to Amended and Restated Employee Stock Purchase Plan (incorporated herein by reference to Exhibit 99.2 to Embrex's Registration Statement on Form S-8 (Registration No. 333-105924), as filed with the Securities and Exchange Commission on June 6, 2003)
- 10.31      Amended and Restated Employee Stock Purchase Plan for Non-U.S. Employees – July 2000 (incorporated herein by reference to Exhibit 99.3 to Embrex's Registration Statement on Form S-8 (Registration No. 333-42676), as filed with the Securities and Exchange Commission on July 31, 2000)
- 10.32      Amendment dated February 6, 2003 to Amended and Restated Non-U.S. Employee Stock Purchase Plan (incorporated herein by reference to Exhibit 99.1 to Embrex's Registration Statement on Form S-8 (Registration No. 333-105924), as filed with the Securities and Exchange Commission on June 6, 2003)
- 10.33      Amendment dated May 15, 2003 to Amended and Restated Non-U.S. Employee Stock Purchase Plan (incorporated herein by reference to Exhibit 99.3 to Embrex's Registration Statement on Form S-8 (Registration No. 333-105924), as filed with the Securities and Exchange Commission on June 6, 2003)

- 10.34      Employment Agreement dated November 15, 1989, between Embrex and Randall L. Marcuson (incorporated herein by reference to Exhibit 10.19 to Embrex's Registration Statement on Form S-1 (Registration No. 33-42482), as filed with the Securities and Exchange Commission on August 29, 1991)
- 10.35      Amendment to Employment Agreement dated May 21, 1996 between Embrex and Randall L. Marcuson (incorporated herein by reference to Exhibit 10.20 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997)
- 10.36      Change In Control Severance Agreement dated May 21, 1996 between Embrex and Randall L. Marcuson (incorporated herein by reference to Exhibit 10.21 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997)
- 10.37      Amendment to Change in Control Severance Agreement dated October 1, 1998 between Embrex and Randall L. Marcuson (incorporated herein by reference to Exhibit 10.23 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1998, as filed with the Securities and Exchange Commission on March 31, 1999)
- 10.38      Employment Agreement dated October 16, 1989, between Embrex and Catherine A. Ricks (incorporated herein by reference to Exhibit 10.21 to Embrex's Registration Statement on Form S-1 (Registration No. 33-42482), as filed with the Securities and Exchange Commission on August 29, 1991)
- 10.39      Change In Control Severance Agreement dated May 21, 1996 between Embrex and Catherine A. Ricks (incorporated herein by reference to Exhibit 10.23 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997)
- 10.40      Amendment to Change in Control Severance Agreement dated October 1, 1998 between Embrex and Catherine A. Ricks (incorporated herein by reference to Exhibit 10.26 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1998, as filed with the Securities and Exchange Commission on March 31, 1999)
- 10.41      Terms and Conditions of Employment between Embrex Europe Limited and David M. Baines dated May 12, 1994 (incorporated herein by reference to Exhibit 10.37 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1995, as filed with the Securities and Exchange Commission on April 1, 1996)
- 10.42      Change In Control Severance Agreement dated June 9, 1996 between Embrex and David M. Baines (incorporated herein by reference to Exhibit 10.27 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997)
- 10.43      Amendment to Change in Control Severance Agreement dated October 1, 1998 between Embrex and David M. Baines (incorporated herein by reference to Exhibit 10.32 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1998, as filed with the Securities and Exchange Commission on March 31, 1999)
- 10.44      Letter Agreement and General Provisions to Employment Agreement dated August 20, 1996 between Embrex and Don T. Seaquist and Amendment to Employment Agreement dated September 9, 1996 between Embrex and Don T. Seaquist (incorporated herein by reference to Exhibit 10.28 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997)
- 10.45      Change In Control Severance Agreement dated September 9, 1996 between Embrex and Don T. Seaquist (incorporated herein by reference to Exhibit 10.29 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997)
- 10.46      Amendment to Change in Control Severance Agreement dated October 1, 1998 between Embrex and Don T. Seaquist (incorporated herein by reference to Exhibit 10.35 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1998, as filed with the Securities and Exchange Commission on March 31, 1999)
- 10.47      Letter Agreement and General Provisions to Employment Agreement dated February 3, 1999 between Embrex and Brian C. Hrudka (incorporated herein by reference to Exhibit 10.39 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1998, as filed with the Securities and Exchange Commission on March 31, 1999)
- 10.48      Change In Control Severance Agreement dated March 24, 1999 between Embrex and Brian C. Hrudka (incorporated herein by reference to Exhibit 10.40 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1998, as filed with the Securities and Exchange Commission on March 31, 1999)



- 10.49 Letter Agreement and General Provisions to Employment Agreement dated May 23, 1997 between Embrex and Joseph P. O'Dowd (incorporated herein by reference to Exhibit 10.41 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 2002, as filed with the Securities and Exchange Commission on March 28, 2003)
- 10.50 Amendment to Employment Agreement dated May 1, 2001 between Embrex and Joseph P. O'Dowd (incorporated herein by reference to Exhibit 10.42 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 2002, as filed with the Securities and Exchange Commission on March 28, 2003)
- 10.51 Change In Control Severance Agreement dated April 12, 2002 between Embrex and Joseph P. O'Dowd (incorporated herein by reference to Exhibit 10.1 to Embrex's Quarterly Report on Form 10-Q for the three months ended March 31, 2003, as filed with the Securities and Exchange Commission on May 13, 2003)
- 10.52 Amendment to Change in Control Agreement dated September 4, 2003 between Embrex and Joseph P. O'Dowd (incorporated herein by reference to Exhibit 10.3 to Embrex's Quarterly Report on Form 10-Q for the three months ended September 30, 2003, as filed with the Securities and Exchange Commission on November 4, 2003)
- 10.53 Indemnification Agreement among Embrex, Randall L. Marcuson, Charles E. Austin, C. Daniel Blackshear, Lester M. Crawford, D.V.M. Ph.D., Peter J. Holzer, Kenneth N. May, Ph.D., and Arthur M. Pappas dated as of April 1, 1999 (incorporated herein by reference to Exhibit 10.2 to Embrex's Quarterly Report on Form 10-Q for the three months ended March 31, 1999, as filed with the Securities and Exchange Commission on May 12, 1999)
- 10.54 Amendment to Indemnification Agreement among Embrex, John E. Klein and Walter V. Smiley dated as of May 17, 2001 (incorporated herein by reference to Exhibit 10.45 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 2001, as filed with the Securities and Exchange Commission on March 22, 2002)
- 10.55 Amendment to Indemnification Agreement between Embrex and Ganesh M. Kishore dated as of January 14, 2002 (incorporated herein by reference to Exhibit 10.46 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 2001, as filed with the Securities and Exchange Commission on March 22, 2002)
- 10.56 Amendment to Indemnification Agreement among Embrex, Inc. and David L. Castaldi dated as of January 13, 2003 (incorporated herein by reference to Exhibit 10.1 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 2003, as filed with the Securities and Exchange Commission on August 5, 2003)
- 10.57 Agreement dated as of January 22, 1996 between Embrex and Merial Select, Inc., as successor to Select Laboratories, Inc. (asterisks located within the exhibit denote information that has been deleted pursuant to a request for confidential treatment filed with the Securities and Exchange Commission) (incorporated herein by reference to Exhibit 10.32 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1995, as filed with the Securities and Exchange Commission on April 1, 1996)
- 10.58 Letter Agreement dated as of January 22, 1996 between Merial Select, Inc., as successor to Select Laboratories, Inc., and Embrex (incorporated herein by reference to Exhibit 10.33 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1995, as filed with the Securities and Exchange Commission on April 1, 1996)
- 10.59 License dated as of January 22, 1996 granted by Merial Select, Inc., as successor to Select Laboratories, Inc., to Embrex (asterisks located within the exhibit denote information that has been deleted pursuant to a request for confidential treatment filed with the Securities and Exchange Commission) (incorporated herein by reference to Exhibit 10.34 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 1995, as filed with the Securities and Exchange Commission on April 1, 1996)
- 10.60 Loan Agreement between Embrex and Branch Banking and Trust Company dated as of April 7, 1999 (incorporated herein by reference to Exhibit 10.1 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 1999, as filed with the Securities and Exchange Commission on August 12, 1999)
- 10.61 License and Royalty Agreement between Embrex and Pfizer, Inc. and its Affiliates dated as of June 22, 2001 (asterisks located within the exhibit denote information that has been deleted pursuant to a request for confidential treatment filed with the Securities and Exchange Commission) (incorporated herein by reference to Exhibit 10.1 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 2001, as filed with the Securities and Exchange Commission on August 13, 2001)

- 10.62 Credit Agreement between Embrex and Advanced Automation, Inc. dated as of April 1, 2001 (incorporated herein by reference to Exhibit 10.1 to Embrex's Quarterly Report on Form 10-Q for the three months ended September 30, 2001, as filed with the Securities and Exchange Commission on November 9, 2001)
- 10.63 Term Loan and Security Agreement between Embrex and Advanced Automation, Inc. dated as of April 30, 2003 (incorporated herein by reference to Exhibit 10.7 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 2003, as filed with the Securities and Exchange Commission on August 5, 2003)
- 10.64 Services Agreement between Embrex and Advanced Automation, Inc. dated as of April 30, 2003 (incorporated herein by reference to Exhibit 10.8 to Embrex's Quarterly Report on Form 10-Q for the three months ended June 30, 2003, as filed with the Securities and Exchange Commission on August 5, 2003)
- 10.65 Engineering, Procurement, and Construction Agreement dated November 26, 2002 between Embrex and Lockwood Greene E&C, L.L.C. (incorporated herein by reference to Exhibit 10.58 to Embrex's Annual Report on Form 10-K for the fiscal year ended December 31, 2002, as filed with the Securities and Exchange Commission on March 28, 2003)
- 10.66 Loan Agreement dated August 6, 2003 between Embrex and Branch Banking and Trust (incorporated herein by reference to Exhibit 10.1 to Embrex's Quarterly Report on Form 10-Q for the three months ended September 30, 2003, as filed with the Securities and Exchange Commission on November 4, 2003)
- 10.67 Promissory Note dated August 6, 2003 of Embrex payable to Branch Banking and Trust (incorporated herein by reference to Exhibit 10.2 to Embrex's Quarterly Report on Form 10-Q for the three months ended September 30, 2003, as filed with the Securities and Exchange Commission on November 4, 2003)
- 10.68 BDA Production and Supply Agreement dated January 29, 2004 between Embrex and Charles River Laboratories, Inc. (asterisks located within the exhibit denote information that has been deleted pursuant to a request for confidential treatment filed with the Securities and Exchange Commission) (incorporated herein by reference to Exhibit 10.1 to Embrex's Quarterly Report on Form 10-Q for the three months ended March 31, 2004, as filed with the Securities and Exchange Commission on May 4, 2004)
- 21 Subsidiaries
- 23 Consent of Ernst & Young LLP, independent registered public accounting firm, to the incorporation of their report dated March 6, 2006 with respect to the consolidated financial statements and schedule of Embrex, Inc. included in this Form 10-K and of their attestation report dated March 6, 2006, regarding management's assessment of the Company's internal control over financial reporting and the effectiveness of the Company's internal control over financial reporting in the Registration Statements on Form S-3 (Registration Nos. 333-18231 and 333-31811), as filed with the Securities and Exchange Commission on December 19, 1996 and July 22, 1997, respectively, and into the Registration Statements on Form S-8 (Registration Nos. 33-51582, 33-63318, 333-04109, 333-56279, 333-42676, 333-91304 and 333-105924), as filed with the Securities and Exchange Commission on September 1, 1992, May 25, 1993, May 20, 1996, June 8, 1998, July 31, 2000, June 27, 2002, and June 6, 2003, respectively
- 24 Powers of Attorney (included in the signature page for this report)
- 31.1 Certification of Principal Executive Officer of Periodic Report Pursuant to Rule 13a-14(a) or Rule 15d-14(a)
- 31.2 Certification of Principal Financial Officer of Periodic Report Pursuant to Rule 13a-14(a) or Rule 15d-14(a)
- 32.1 Certification of Principal Executive Officer of Periodic Report Pursuant to Rule 13a-14(b) or Rule 15d-14(b) and 18 U.S.C. Section 1350
- 32.2 Certification of Principal Financial Officer of Periodic Report Pursuant to Rule 13a-14(b) or Rule 15d-14(b) and 18 U.S.C. Section 1350

**EMBREX, INC.  
SUBSIDIARIES**

Name	Jurisdiction of Organization
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Embrex Europe Limited	United Kingdom
Embrex Sales, Inc.	North Carolina
Embrex BioTech Trade (Shanghai) Co., Ltd.	People's Republic of China
Inovoject® do Brasil Ltda.	Brazil
Embrex France s.a.s.	France
Embrex Iberica	Spain
Embrex Poultry Health, LLC	North Carolina
Embrex de Mexico, S. de R.L. de C.V.	Mexico
Vaccination Services, S. de R.L. de C.V.	Mexico

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statements (Form S-3 Nos. 333-18231 and 333-31811) of Embrex, Inc.,
- (2) Registration Statement (Form S-8 No. 333-105924) pertaining to the Embrex, Inc. Amended and Restated Employee Stock Purchase Plan and Amended and Restated Non-U.S. Employee Stock Purchase Plan, and
- (3) Registration Statements (Form S-8 Nos. 33-51582, 33-63318, 333-04109, 333-42676, 333-56279, and 333-91304) pertaining to the Embrex, Inc. Amended and Restated Incentive Stock Option and Nonstatutory Stock Option Plan;

of our reports dated March 6, 2006, with respect to the consolidated financial statements and schedule of Embrex, Inc., Embrex, Inc. management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting of Embrex, Inc. included in this Annual Report (Form 10-K) of Embrex, Inc.

/s/ Ernst & Young LLP

Raleigh, North Carolina  
March 6, 2006

## CERTIFICATION

I, Randall L. Marcuson, certify that:

1. I have reviewed this annual report on Form 10-K of Embrex, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 8, 2006

/s/ Randall L. Marcuson  
Randall L. Marcuson  
President and Chief Executive Officer

## CERTIFICATION

I, Don T. Seaquist, certify that:

1. I have reviewed this annual report on Form 10-K of Embrex, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 8, 2006

/s/ Don T. Seaquist  
Don T. Seaquist  
Vice President, Finance and Administration

**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Embrex, Inc. (the "Company") on Form 10-K for the twelve months ended December 31, 2005 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Randall L. Marcuson, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to my knowledge, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

March 8, 2006

/s/ Randall L. Marcuson  
Randall L. Marcuson  
President and Chief Executive Officer

**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Embrex, Inc. (the "Company") on Form 10-K for the twelve months ended December 31, 2005 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Don T. Seaquist, Vice President, Finance and Administration of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to my knowledge, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

March 8, 2006

/s/ Don T. Seaquist  
Don T. Seaquist  
Vice President, Finance and Administration



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## Corporate Information

### Directors

*C. Daniel Blackshear*  
President and Chief  
Executive Officer  
Carolina Turkeys

*David L. Castaldi*  
Former Chairman and Chief  
Executive Officer  
Cadent Medical Corporation

*Peter J. Holzer*  
Chairman of the Board  
Retired Executive Vice  
President  
The Chase Manhattan  
Bank, NA

*Ganesh M. Kishore, Ph.D.*  
Vice President of Science &  
Technology and Chief  
Biotechnology Officer  
DuPont Company

*John E. Klein*  
Executive Vice Chancellor  
for Administration  
Washington University in  
St. Louis

*Randall L. Marcuson*  
President and Chief  
Executive Officer  
Embrex, Inc.

### Committees

#### **Compensation Committee**

David L. Castaldi  
Ganesh M. Kishore, Ph.D.  
John E. Klein\*

#### **Audit Committee**

C. Daniel Blackshear  
Peter J. Holzer\*  
John E. Klein

#### **Nominations Committee**

C. Daniel Blackshear  
David L. Castaldi  
Peter J. Holzer\*  
Ganesh M. Kishore, Ph.D.

\*Chairman

### Officers

*David M. Baines, Ph.D.*  
Vice President, Global Sales  
and Marketing

*Randall L. Marcuson*  
President and Chief  
Executive Officer

*Joseph P. O'Dovid*  
Vice President, Global  
Product Development and  
Supply and Research and  
Development

*Don T. Seaquist*  
Vice President, Finance and  
Administration and  
Corporate Secretary

### Corporate Offices

Embrex, Inc.  
P.O. Box 13989  
Research Triangle Park,  
NC 27709-3989  
Telephone (919) 941-5185  
Facsimile (919) 941-5186  
[www.embrex.com](http://www.embrex.com)

NASDAQ Ticker Symbol:  
EMBX

### Registrar and Transfer Agent

American Stock Transfer &  
Trust Company  
Operations Center  
6201 15th Avenue  
Brooklyn, NY 11219  
Toll-Free (888) 563-9653  
Direct Line (718) 921-8143  
Fax (718) 921-8116

### Independent Auditors

Ernst & Young LLP  
Highwoods Tower One, Suite 700  
3200 Beechleaf Court  
Raleigh, NC 27604-1063

### Corporate Counsel

Smith, Anderson, Blount, Dorsett,  
Mitchell & Jernigan LLP  
2500 Wachovia Capitol Center  
Raleigh, NC 27601

### Investor Relations Inquiries

Embrex, Inc.  
Attn: Investor Relations  
P.O. Box 13989  
Research Triangle Park, NC 27709-3989  
Telephone (919) 941-5185  
Fax (919) 941-5186

### Trademarks

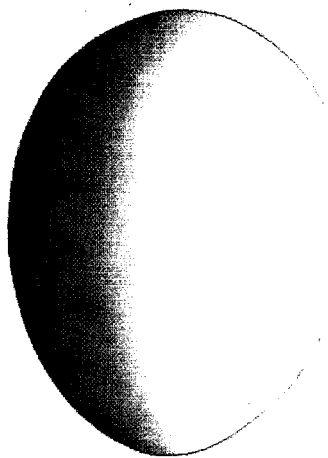
Embrex®  
The In Ovo Company®  
Inovobject®  
Bursaplex®  
Egg Remover®  
Vaccine Saver®  
Newplex™  
Inovocox™  
Inovometrix™

### Annual Meeting of Shareholders

The annual meeting of shareholders will be held at  
9 a.m., on May 18, 2006, at Embrex, Inc., 1040 Swabia  
Court, Durham, NC 27703.

**Note:** This Annual Report contains forward-looking  
statements. See Part I of the Form 10-K accompanying  
this document for further information.

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